

THE
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To our Readers and Correspondents.

Beginning with Vol. XXXVII., July, 1878, the CHICAGO MEDICAL JOURNAL AND EXAMINER prints all records of length and weight in terms of the Metric System, and all records of temperature in degrees of the Centigrade Scale. The Metric System, legalized in the United States and Great Britain, is extensively or exclusively employed by other civilized nations, and has thus become an essential part of the international language of science. It is recommended for adoption to the profession in this country by the American Medical Association and other scientific bodies. To-day no physician can afford to be ignorant of its value, its simplicity and the meaning of its terms.


The subjoined tables and scales, which have been kindly prepared for us by Prof. W. S. Haines, will be continuously reproduced in subsequent numbers of this journal, for the ready reference of our readers and correspondents.

METRIC MEASURES OF LENGTH.

Millimeter.....	0.001 of a Meter ...	0.03937 inches.
Centimeter.....	0.01 " "	0.39370 "
Decimeter.....	0.1 " "	3.93707 "
Meter.....	1. Meter.....	39.37079 "
Decameter.....	10. Meters	393.70790 "
Hectometer.....	100. "	3937.07900 "
Kilometer.....	1000. "	39370.79000 "

METRICAL WEIGHTS.

Milligram.....	0.001 of a Gram	0.015 grains.
Centigram.....	0.01 " "	0.154 "
Decigram.....	0.1 " "	1.543 "
Gram.....	1. Gram.....	15.432 "
Decagram.....	10. Grams	154.323 "
Hectogram.....	100. "	1543.234 "
Kilogram.....	1000. "	15434.348 "

 The United States "nickel" five cent piece weighs five grams, and is two centimeters in diameter.

APPROXIMATE EQUIVALENT OF METRICAL WEIGHTS.

For Rapid Reference.

Milligrams.	Grains.	Decigrams.	Grains.
1 (written 0.001 or |001)*..	$\frac{1}{1000}$	1 (written 0.1 or |1).....	$1\frac{1}{2}$
2.....	$\frac{1}{500}$	2.....	3
3.....	$\frac{1}{333}$	3.....	$4\frac{1}{2}$
4.....	$\frac{1}{250}$	4.....	6
5.....	$\frac{1}{200}$	5.....	$7\frac{1}{2}$
6.....	$\frac{1}{166}$	6.....	9
7.....	$\frac{1}{142}$	7.....	11
8.....	$\frac{1}{125}$	8.....	$12\frac{1}{2}$
9.....	$\frac{1}{111}$	9.....	14
Centigrams.	Grains.	Grams.	Grains.
1 (written 0.01 or |01).....	$\frac{1}{100}$	1 (written 1. or |1).....	15
2.....	$\frac{1}{50}$	2.....	30
3.....	$\frac{2}{111}$	3.....	46
4.....	$\frac{1}{62}$	4.....	61
5.....	$\frac{3}{125}$	5.....	77
6.....	$\frac{2}{100}$	6.....	92
7.....	1	7.....	108
8.....	$1\frac{1}{4}$	8.....	123
9.....	$1\frac{1}{3}$	9.....	139
A Kilogram— $2\frac{1}{5}$ lbs. Avoirdupois.			

* The decimal line instead of points makes errors impossible.

METRIC FLUID MEASURES.

When using the metric system, fluids are preferably prescribed by weight, employing the gram, its multiples and subdivisions, just the same as with solids, thus avoiding the errors due to refraction, adhesion, and inaccurate measuring vessels. For practical purposes four grams of water may be regarded as equivalent to a fluid drachm of that liquid, and the same may be considered true of tinctures and infusions; syrups, on the average, are about one-third heavier than water, so that a fluid ounce of a syrup will be approximately represented by 43 grams.

If preferred, however, fluids may be prescribed by volume in the metric, just as in the present system, using for that purpose the *Cubic Centimeter*, that is, a volume represented by a cube all of whose sides measure one centimeter. An ordinary back-gammon die is usually about this size. One cubic centimeter (written 1 C. C.) = 16.231 minims. It is approximately regarded as one fourth of a fluid drachm.

APPROXIMATE EQUIVALENTS OF CUBIC CENTIMETER.

0.001 C. C. =	.....	$\frac{1}{40}$	minim.
0.01 " =	.....	$\frac{3}{4}$	"
0.1 " =	.....	$1\frac{1}{2}$	"
1. C. C. =	.....	15	minim.
4. " =	.....	1	fluid drachm.
16. " =	.....	4	fluid drachms.
32. " =	.....	1	ounce.

1000 C. C. (usually known as a **Liter**) is a trifle more than one quart, wine measure.

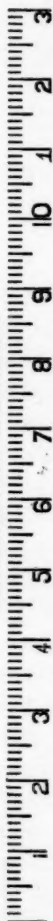
The following prescription—

R: Potassii bromidi, \mathfrak{ss} .
Elixir aurantii, fl., $\mathfrak{z}\text{vii}\mathfrak{j}$.
M.

Would, in metric terms, be written:

Potassic bromide, 32 |
Orange elixir, 250 |
Mix.

CENTIMETERS AND MILLIMETERS.



Centigrade Scale.	Fahrenheit Scale.
45°	113°
44°	112°
43°	110°
42°	108°
41°	106°
40°	104°
39°	102°
38°	100°
37°	99°
36°	97°
35°	95°
34°	94°
33°	92°
32°	90°
31°	88°
30°	86°

Original Lectures.

HERNIA OF THE CORNEA — ACTION OF ESERINE AND PILOCARPINE.

(Clinical Lecture delivered at the Illinois Charitable Eye and Ear Infirmary, October 9, 1878.)

By F. C. HOTZ, M. D.

GENTLEMEN: The right eye of this boy exhibits a peculiar affection of the cornea, which, though not very common, is practically so important that it may well occupy your attention for a few moments. Without at present taking any notice of the granular condition of the conjunctiva, and the faint pericorneal redness, you will direct your attention to the cornea. This membrane has lost its brilliant lustre; its surface is dull, uneven, hazy, and traversed by fine, slightly tortuous blood vessels. In the lower half of the cornea the cloudiness is like a uniform thin mist through which you can still pretty well distinguish the color of the iris and the lower margin of the pupil. In the upper half the cloudiness increases in density to form a grayish white opacity. And in the center of this opacity, about midway between the center and upper margin of the cornea, you observe a small, oval, shining spot of the size of a pin's head. When you look at it from the front, it appears jet black, but when you inspect it from the side, you notice that it is a perfectly transparent vesicle which projects a little above the anterior surface of the cornea. You will further notice that through this small vesicle, the color and design of the iris appears better defined than through the lower half of the cornea; indeed, you can see it almost as distinctly as through a normally transparent cornea.

Focal illumination shows better than daylight the perfect transparency of this minute portion of the cornea.

This peculiar phenomenon of a transparent and projecting spot in the midst of a dense opacity of the cornea, is called a *hernia of the cornea or keratocoele*. In order to understand its origin and nature, we must briefly consider the anatomical changes which take place in the tissues of the cornea, in case of ulceration. Proceeding from the anterior surface of the cornea the ulceration destroys successively the anterior epithelium, Bowman's membrane, and the several layers of the corneal tissue proper. Now, the first indication of a pathological (inflammatory or ulcerative) process going on in these structures, is the loss of transparency; they become opaque, and therefore an ulcer which has not gone beyond the fibrillar tissue of the cornea, presents a gray, grayish white, or yellowish gray color. But below these layers there is the so-called membrane of Descemet. This is a structureless, very elastic membrane, lined with one layer of pavement epithelium, the posterior epithelium of the cornea. This membrane is not easily affected by ulceration, and, owing to its structureless nature, preserves its transparency; and when a corneal ulcer has extended in depth as far as the membrane of Descemet, its floor suddenly becomes transparent and clear, like an ulcer at the time when the destruction has ceased and all molecular debris has been removed, and the process of reparation has commenced. And, gentlemen, in this stage a corneal ulcer has often been a source of deception to both physician and patient. The inexperienced physician, noticing the remarkable change in the appearance of the ulcer, does not recognize the real, dangerous character of this change, and prognosticates a very favorable, speedy recovery, when to his terror a few hours or days later he finds the cornea perforated. And patients also are often misled. Suppose the ulceration occupies the center of the cornea; its opacity obscures the pupil and impairs the sight; the deeper the ulcer, the denser the opacity and the greater the impairment of vision. Now, picture to yourselves the happy surprise of a man who for weeks has been almost blind with a central ulcer of the cornea; at suddenly finding that he can see again pretty well with that eye. He, of course greets this change with joy as the sure

sign of the long looked-for crisis toward recovery ; he laughs at the serious looks of his medical adviser who is far from sharing his patient's hopefulness, but on the contrary earnestly enjoins double caution, lest the eye might be suddenly destroyed. The patient is disposed to think that all danger is removed, since his sight has been restored, and further precaution is unnecessary. But suddenly something gives way, the patient feels a violent pain through his eye, a few drops of water run down his cheek, and the sight is gone, perhaps forever. Descemet's membrane which formed the transparent basis of the ulcer while the patient was enjoying the sudden return of his sight, had yielded to the pressure of the aqueous humor, it ruptured, and a perforation of the cornea was established. This is the usual result of deep progressive ulceration of the cornea.

But when the ulcer is very small the membrane of Descemet may, for some time, form the basis of the ulcer, and under favorable circumstances the cornea may escape the fate of perforation. In these cases a small portion of Descemet's membrane, (which, as I said before, is very elastic) is crowded into and through the tunnel-like canal of the ulcer by the pressure of the aqueous humor, just as the peritoneum is pushed into the inguinal canal in the case of hernia. Therefore the name "hernia of the cornea" is given to this affection, although strictly speaking it is a protrusion of Descemet's membrane alone. Such is the condition of this patient's right cornea. This transparent and prominent spot represents a small pouch of the membrana Descemeti, protruding through a deep, crater-like ulcer of the cornea. The patient, 13 years of age, has granular conjunctivitis, in the course of which ulceration of the cornea is a common complication. And one of these ulcers deepened until it reached the posterior glass membrane. You cannot see the depth of the ulcer because its space is filled by this hernial sac which comes even with, or rather rises a little above the anterior surface of the cornea. But if I should puncture this vesicle with the point of a needle you would see the whole aqueous humor escape, the sac collapse, and a deep defect in the cornea appear in its place.

Usually in cases of this kind the thin membrane of the keratocele is gradually stretched to its utmost capacity, and finally

gives way to the continued pressure of the aqueous humor. This fluid then escapes, the iris falls against the perforation, and is permanently fastened there by agglutination. An adherent leucoma, with all its unpleasant, often disastrous consequences, is the ultimate result.

From these observations, it is obvious what our chief object in the treatment of this *kesatocoele* must be. We must endeavor to reduce the hernia, to prevent, if possible, the occurrence of perforation, and to heal the ulcer of the cornea.

If we possessed a medicine which could so effectually diminish the pressure of the aqueous humor that the *membrana Descemeti* could resist it without bulging, this remedy would admirably fulfill the indications in our case. It would reduce the hernia of the cornea, and by its reposition would remove the greatest obstacle to a speedy repair of the ulcerated cornea. For as long as the hernial sac occupies the gap of the corneal ulceration, it prevents, like a wedge, its edges from approaching each other, and renders it utterly impossible that granulations can sprout up from the sides and repair the defect. The same remedy would also remove all danger of perforation, because the minute the pressure of the aqueous humor is diminished, all strain which could occasion a rupture, is taken from the *membrana Descemeti*. Until quite recently, such remedy was unknown to ophthalmic surgeons, and the treatment of a hernia of the cornea consisted in the application of pressure bandage, repeated paracentesis of the cornea, or iridectomy.

The *pressure bandage* should act like a truss; it should overcome the pressure of the aqueous humor upon the posterior surface of the cornea by a counter pressure upon its anterior surface; it should push the hernia back and prevent its coming out again.

Paracentesis of the cornea diminishes the pressure upon the posterior surface of the cornea by withdrawing the aqueous humor. If you take a tensely-filled bladder and let out a part of the contents, its walls will become flaccid with the decrease of tension. So, if you drain off the aqueous humor, the tissues of the eye in general, and the cornea in particular, are relieved of a certain amount of the pressure which the contents of the globe (aqueous humor, crystalline lens and vitreous body) exert upon them. But

the relief afforded by paracentesis is of a very transient nature, because the anterior chamber is speedily refilled with aqueous humor, and, *pari passu*, the original pressure restored. Therefore the operation must be often repeated if the pressure is to be kept below the normal degree for any length of time.

Iridectomy is known to permanently lower the intra-ocular pressure, and for this reason most surgeons consider it preferable to paracentesis in all cases in which a prolonged diminution of pressure is indicated.

Within the past three years, however, ophthalmic surgeons have become acquainted with two remedies which seem likely to play an important rôle in the treatment of deep ulcerations of the cornea, and other affections which call for a reduction of the intra-ocular pressure. These two remedies are, the alkaloid of the calabar bean, called *eserine*, and the alkaloid of jaborandi, called *pilocarpine*. The sulphate of eserine and the muriate of pilocarpine are the preparations now used in ophthalmic practice. They are both quite soluble in water, making a clear, colorless solution; but in a warm temperature the solution of eserine turns red, and becomes inefficient, while the solution of pilocarpine does not change in color and efficiency. This solution (0.05 in 25 grams of water) before you, has been prepared two months ago; it is perfectly clear yet, and as effective as on the first day.

If you put a drop of it in your eye, you feel a faint smarting sensation, and notice a slight blush of the conjunctiva. But this irritation passes away quickly. After ten minutes the pupil is contracted, and distant objects appear indistinct; in twenty minutes the pupil is constricted to a small pin hole, and distant vision is exceedingly indistinct, but can be cleared up by strong concave glasses. In other words, the eye has become highly near-sighted. The myopia is induced by spasm of the ciliary muscle, and the contraction of the pupil (*myosis*) by spasm of the sphincter pupillæ. Both alkaloids seem to have the same effect upon the eye; only pilocarpine produces less conjunctival irritation than eserine.

For our present purpose it is particularly interesting to learn that simultaneously with the spasm of the intra-ocular muscles the intra-ocular tension is diminished. In 1876, Laqueur, of

Strassburg, reported * that he observed a diminution of the hardness of glaucomatous eyeballs after the instillation of eserine. In the same year, Adolph Weber, of Darmstadt, published † a very interesting paper, "On Calabar and its Therapeutical Utility."

With a very sensitive instrument (tonometer) he had carefully tested the degree of tension of the cornea before and after the application of extract of calabar bean. A long series of experiments, made in 1869, convinced him of the fact that he had found in the calabar bean a drug which decidedly lessened the pressure upon the posterior surface of the cornea. His conviction was further strengthened by an observation which fully confirmed his experimental studies. In a case of keratocele he observed that after application of calabar the vesicle of the protruding hernia sank back to the basis of the corneal ulcer; and under the continued use of calabar the protrusion of the membrana Descemeti did not return; the ulcer was filled with new tissue and covered with new and transparent epithelium; the eye recovered, and a ring-shaped cicatrix, with a transparent center, was the only trace the keratocele had left. Besides, in keratocele, Dr. Weber found the extract of calabar bean (which he used till 1875, when he substituted the alkaloids, eserine and pilocarpine) most useful in deep, progressive ulcers of the cornea, conical cornea, staphyloma, and peripheric prolapse of the iris.

Wecker, of Paris, who first introduced the alkaloids in ophthalmic practice, fully confirmed ‡ Weber's observations and therapeutical indications of the use of eserine and pilocarpine.

Henry W. Williams, § of Boston, has during the past two years made extensive use of eserine and pilocarpine in the treatment of corneal ulcers. His experience not only coincided with that of the other authors, but he also added superficial keratitis to the affections for which the alkaloids are indicated. "In phlyctenular or herpetic eruptions of the conjunctiva, or of the epithelial layer of the cornea, eserine is of service, especially when

* *Centralbl. d. Medicin. Wissenschaften*, 1876, No. 24.

† *Graefe's Archiv. f. Ophthalmologie*, Band XXII, 4.

‡ *Klin. Monatsbl. f. Augenheilkunde*, 1877, p. 60.

§ *Boston Med. and Surgical Journal*, March 14, '78.

photophobia is present, and is far preferable to atropia, which, by causing intolerance of light, adds to the patient's discomfort."

The unanimous testimony of these and other observers seems to point out clearly enough the course of treatment we should pursue in our case. And I will tell you that we tried this plan, but were obliged to abandon it soon again. The boy was admitted to the infirmary on the first day of August. The cornea was hazier and the keratocele a little larger than it is now, and the whole upper half of the cornea appeared to bulge out. Pilocarpine was dropped in the eye in the morning and evening. After two days the upper half of the cornea showed the same curvature as the lower half, and the hernia appeared somewhat sunken in. Under the continuance of pilocarpine, however, the eye became very painful, and red around the cornea, and a fresh ulcer made its appearance in the center of the cornea. These unfavorable symptoms increased in degree so much that on the fifth day it was thought best to discontinue the use of pilocarpine. We applied the pressure bandage, and the eye quickly recovered from the attack. In the middle of August a second trial with pilocarpine had the same result. The eye did not seem disposed to tolerate the new treatment; and we had to fall back upon the old resources of pressure bandage and iridectomy. Under the continued use of the bandage, the eye improved in so far as the lower half of the cornea cleared up sufficiently to afford us a pretty good view of the iris and pupil. We could then ascertain that the pupil was contracted and the edge of the iris firmly fastened to the anterior surface of the crystalline lens.

This state of the pupil fully accounted for the intolerance the eye had shown for the pilocarpine treatment. It is a well established experience that an eye with extensive or circular posterior synechiæ as the result of iritis, generally does not well bear any stimulating, topical treatment. And it is evident that pilocarpine, the most powerful stimulant for the musculature of the iris must have a bad effect on an eye which has just recovered from an inflammation of the iris.

The failure of pilocarpine in our case, therefore, only confirms the experience of others to the effect that the use of this remedy

is contra-indicated in affections of the iris, and consequently also in corneal troubles when the iris is implicated.

The condition of the iris and pupil at once settled the question what the next step should be in the treatment of our case. For reasons which I shall discuss at some future occasion, circular synechiæ of the iris are regarded as a strong indication for the performance of iridectomy. And, as I have stated before, the same operation is chosen by most surgeons if an operative interference is deemed necessary in case of keratocele. The two conditions being united in our case, there could be no doubt but what iridectomy should be performed; and the only question to be decided was in regard to the locating of the artificial pupil. The greater transparency of the lower half of the cornea suggested a downward iridectomy, because the operation could be done under more favorable conditions, and would probably at once restore a pretty good sight. But then, a coloboma of the lower portion of the iris is a greater blemish to the eye than a defect in the upper half of the iris, because the latter is to a great extent concealed by the upper lid. Besides, the upper half of the cornea was not so cloudy that the point of an instrument in the anterior chamber could not be seen without difficulty; and it was very likely that after the operation this haziness would gradually disappear, and the upper part of the cornea would become as clear as the lower. And finally, if a piece of the upper half of the iris was excised, the iris was definitely removed from behind the keratocele, and could not be caught in a perforation of the cornea if the hernial sac should burst after all.

These reasons induced me to perform an upward iridectomy on September 19. The eye recovered quickly from the immediate effect of the operation, and has never since shown any signs of irritation, although occasionally astringent applications were made upon the thickened and congested conjunctiva. Under the continued use of the pressure bandage the protrusion of Descemet's membrane has decidedly diminished in degree and circumference. This sign, of course, is the best indication that the eye is improving and progressing favorably toward recovery.

Original Communications.

THE SEQUEL AND FATAL TERMINATION OF A CASE OF LYMPHATIC ENLARGEMENT OF THE RIGHT LEG AND THIGH.

BY W. H. DAY, M. D., LONDON.

(A paper read to the London Pathological Society, May 24, 1878.)

[Through the kindness of the President of the London Pathological Society, we were recently put into communication with the author of the subjoined paper, which we desired to consult. Dr. Day has kindly forwarded to us advance sheets of the Transactions of the London Pathological Society, from which we reproduce his interesting narrative.—Ed.]

In order that this remarkable case may be understood by members of the Society who are unacquainted with the history and report as described in the Society's Transactions (Vol. II., p. 104), I deem it advisable to briefly recapitulate the leading symptoms as recorded there for the information of members who were not present at the reading of the paper.

Nine years ago I recorded the case of T. C. D., at that time 7 years of age. The right leg was noticed to be larger than the left when he was $2\frac{1}{2}$ years old, causing no inconvenience, and not affecting the general health. When four years old the swelling extended into the thigh, and like the leg was firm and inelastic; yellowish white spots appeared over the head of the tibia, looking like small encysted growths, containing cheesy matter, and subsequently drying up and disappearing. After exercise, fatigue or an attack of indigestion, the leg became hard, brawny, and covered with patches of erythema. When the inflammatory blush

disappeared, the limb presented yellowish patches like pityriasis versicolor. In 1866 he could not flex the limb, and the symptoms were thought attributable to obstruction of nearly the whole length of the femoral vein. The prepuce became much hypertrophied, and, in 1867, necessitated removal from the constant dribbling of urine. In 1868 a pearly vesicle like herpes formed on the edge of the prepuce, which ruptured and discharged a chylous fluid like lymph. After this the limb lessened in size. In January, 1869, as much as half a pint of creamy fluid escaped from this small orifice, and the following day there was shivering and rigor; smaller and transparent vesicles began to form on the glans penis, discharging lymph from time to time, and he was very ill. The toes were swelled and of waxy whiteness, whilst the diseased limb, in circumference, was three inches larger than the left. - For the next three years he was tolerably well, but suffered at uncertain intervals from attacks of weakness, and pain and swelling in the limb.

September 15, 1872.—After two days of fatigue and running about, he woke up with pain and stiffness in the leg, the foot and toes being more particularly attacked. When lying down he could not raise the limb, and this loss of power accompanied each attack. There were thirst, headache, and pungent heat of skin; temperature 39° , pulse 130 full, with considerable tension. Calomel 0.06 and a saline aperient draught emptied the bowels and relieved the pain and excitement. On the 17th he was easier, and all the discomfort was in the foot. On the 18th (next day) pain came on in the knee-joint, which was exquisitely tender and sensitive; he cried out from the suffering, and could get no ease at night. A dose of chloral failed to procure him any sleep. He remained in considerable pain till the 20th, when I was summoned to him in the country. The knee was partially flexed on the thigh—it was hot, swollen and pale; there was effusion beneath the integuments on either side of the patella, but apparently not in the joint itself. A warm lead lotion was kept constantly applied under oiled silk, and the swelling diminished. The urine was densely loaded with pink lithates, and on standing in a two-ounce bottle only four grams were clear and free from sediment. Citrate of potash in water was given as a

drink. When the leg was at rest he remained free from suffering, and was able to travel from Cambridgeshire to London on the 23d, but the slightest movement of the joint, or the least pressure, gave pain.

The ten days' confinement to bed had greatly reduced his strength, and his loss of flesh was very noticeable; he was pallid too and exsanguine, and his voice too at these times became husky and weak.

24th.—There was no pain in the knee except on pressure and the movement of the limb; the swelling was especially marked over the tubercle of the tibia, and occupied the site of the two old dried lymphatics; there was distinct fluctuation, but no redness or throbbing. The reduction in the size of the thigh had never been so marked, and the skin, instead of being stretched and hard, was lax and supple.

The following were the measurements of the respective limbs:—

DISEASED OR RIGHT LIMB.	SOUND LIMB.
Above knee.....35.0 centim.	Above knee.....25.0 centim.
Middle of thigh...37.5 “	Middle of thigh...31.5 “
Upper third do....39.0 “	Upper third do...32.5 “
Below knee.....30.0 “	Below knee .....30.0 “
Calf.....32.5 “	Calf.....20.0 “
Above ankle.....22.5 “	Above ankle.....17.5 “

27th.—The swelling of the knee was subsiding—great tenderness over the tibia previously alluded to.

October 2d.—For some months he had been greatly troubled with nettle-rash, the back and shoulders were mostly affected, but the diseased limb was not more involved than the rest of the body. He experienced a good deal of pain in getting down stairs. The chief symptoms at this time were debility, pallor of face, loss of appetite, and inability to straighten or bear any weight on the affected limb.

8th.—For the last four days he had complained of great pain in the *left* inguinal region, and there was an enlarged inguinal gland the size of a small nut; to this spot he referred his suffering, and any movement of the limb increased it; he was exhausted and

feverish towards the evening, and in the night perspired a good deal. His appetite was very capricious, and he was fretful and irritable on slight provocation. The affected limb had a very numbed sensation, which probably arose from exhaustion and weakness of the muscular system. Any attempt to move the limb threw the muscles into spasmodic action, and he would shiver like a person in the cold stage of ague.

22d.—There had been increasing pain in the right knee-joint for a week. He often awoke in the night from the pain, and no ease could be obtained till he had taken a full sedative. I had my doubts whether mischief was not proceeding in the joint, but Sir James Paget, who saw him, considered the pain neuralgic, and advised a continuance of quinine, brandy, and nourishment.

November 5th.—There had been no ease since last report, and the suffering was pitiable to witness, coming on in paroxysms at night, sometimes lasting for hours, and preventing sleep. Sir J. Paget saw him again, and advised bromide of potassium, a liniment of aconite, chloroform and opium, which seemed for a time to relieve him. About the close of the month the pain in the knee-joint departed.

December 6th.—For a week he had complained of pain in the right hip, below and to the right of the anterior superior spinous process of the ilium. Yesterday, and again to-day, there had been great pain coming on in the three outer toes of the right side, and a general aching of the limb. When pain was present the three toes trembled like the rest of the limb, and were pale, smooth and shining. There was no oscillation of temperature, which was normal, morning and evening scarcely varying; the night perspiration had subsided, but the pulse was weak and unsteady, and his appetite failed, perhaps by reason of the sedative, which he was compelled to take at night.

18th.—He came down to dine to-day, but not without pain. For the last week he had suffered from extreme nausea, and at times severe vomiting and retching. The pain had come on in a moment when most occupied with his amusements. Of late he has looked very sallow, and complained of pain over the back of his neck, and his eyes have become weak and inflamed. I now prescribed steel wine and arsenic twice a day after meals.

25th.—He came down stairs to dine, and was tolerably well, though he looked dreadfully pale and exhausted; two days later there was agony in the leg for hours, and he was very sick throughout the day without apparent cause.

1873, January 8th.—Having been free from pain for a week, he went out for a drive. As medicines failed to afford relief they were given up.

March 1st.—He passed a round worm, having for weeks suffered from nausea and vomiting.

19th.—Was kept awake with agony in the knee and starting of the limb; he had no rest till he had taken a third dose of chlorodyne.

October 18th.—For the last month he had been free from pain, sleeping well and enjoying his food, but easily tired after any kind of exertion. At Felixstowe, in Suffolk, where he stayed for six weeks, he did not get on so well, the place being cold and the comforts much less than at home. No discharge of lymph since March—a period of six months.

Used crutches for $1\frac{1}{2}$ years, and during this time was comparatively free from pain.

1875.—Sufficiently well to attend with tolerable regularity at school; he had comparative freedom from pain, which was now always in the foot, and there was an occasional discharge from the foot also.

1876.—In Ju'y (weather very hot), after much fatigue, he was seized with a severe feverish attack, lasting four days, during which the leg was very hot and red; he was much weakened, and after going from home, took cold, from which he suffered for two months, accompanied with cough. During this time the discharge occurred frequently, and he was much reduced and prostrate.

In October, when at the seaside, and after running about, he had a sharp febrile attack; on the 28th, when he attempted to get out of bed, he fell; the big leg, which had been stiff throughout the night, proving useless to him and painful. A week's rest in bed restored him, though, on first getting up, he was obliged to use his crutches again for a few days.

On December 13th, he took cold and had a return of cough, with slight bronchitis, and kept his bed and room for a month, getting out again on January 12th, 1877.

All the autumn term his tutor had come to him at home; but at his especial wish, after Christmas he resumed his school life, and for the next month enjoyed unusually good health, practicing the organ daily, and working six hours. He suffered but little pain, and had only a slight occasional discharge from the foot.

On January 29th, 1877, whilst sitting at dinner, his mother noticed that the lower half of his face turned livid, and the servants noticed it also, but he did not complain. On the following day he returned from school with a headache, which had come on an hour previously. He went to bed directly, and remained there part of next day. He was unusually well the three following days, till taken ill in church.

February 4th.—Went to church well at 11 a.m., and whilst in an erect posture, suddenly fell down in a state of syncope at 12. On rallying, he was led out into the open air, when he complained of great pain over the hypogastrium, and he was deadly pale. He, however, was able to walk home with assistance, and just as he entered his bed-room he began to shiver, and was placed on the bed in a state of collapse, with imperceptible pulse, livid hands and features; the tremor was as great as was seen in the cold stage of ague. He referred all his pain to the hypogastrium. Brandy was given at once, and t. opii 1 C. C. thrown up the rectum.

12:45.—The pain had now shifted into the leg and knee, and, as it was very severe, the sedative injection was repeated.

1 p. m., free vomiting took place.

1:30, vomited a quantity of bilious fluid.

2:30, reaction fully established; temp. 39.5° ; pulse 136 full and bounding; skin hot and pungent; intense thirst; urine passed freely, copious and clear.

4:15, restless, in great pain, and a draught of hydrate of chloral and bromide of potassium, of each one gram, was taken.

5:0, in great agony and begs for relief. About 8 grams of bichloride of mythelene were inhaled, extending over half an hour.

7:0, free from pain at intervals for a few minutes together;

skin moist; temp. 39.1° ; pulse 132; R. 56, short and catching.

11:30, temp. 40.2° ; pulse 144; R. 48; urine passed; conjunctivæ injected; much wandering. A soap-and-water enema brought away some scybalæ from the bowel and a little fecal fluid.

5th.—1:15 a. m., temp. 40.3° ; pulse 140; R. 44, very shallow; sleeping.

2:15, temp. 40.5° ; pulse 140; R. 48; sleeping restlessly; drank iced water, but did not understand anything addressed to him.

3:15, aspect wild, staring and excited; has tetanic spasms in the arms, and both hands spasmodically clenched; *iced water cap applied* to the head.

4:0, he looks brighter, swallows well, and the hands are relaxed; temp. 40.6° ; pulse 144; R. 40.

5:0, temp. 40.6° ; pulse 140; R. 44.

6:0, temp. 40.3° .

7:0, temp. 39.9° ; pulse 142; R. 44.

8:30, bowels acted.

9:30, bowels acted.

10:0, temp. 39.5° .

10:30, very copious action of bowels.

11:45, temp. 39.4° ; pulse 140, very weak and small; face cool and lips rather dusky; breathing quiet and regular, but still quick; intellect quite clear. Drank a small quantity of beef-tea and iced champagne.

1:30 p. m., temp. 39.2° ; pulse 140, weak; face alternately flushes and turns pale; is very restless and unconscious, and the iced cap is kept on with difficulty.

2:30, temp. 39.2° ; pulse 140, very weak; R. 44; the bowels acted unconsciously, after which he asked for some cold water; face ashy.

3:30, bowels again acted; sick after a little champagne and beef-tea.

4:10, sickness and pain in stomach; slight motion; cannot rest quiet for a moment together; t. opii 1 C. C. per rectum.

6:0, temp. 40.0°; pulse 160, fluttering; R. 48; rested after the enema, and the bowels have not since acted. Two decigrams of quinine, t. opii 1 C. C. and beef-tea gm. 60 ordered to be thrown into the rectum every two hours.

7:0, temp. 40.0°; pulse 160; R. 56; unconscious.

9:0, temp. 39.9°; pulse 160, so small that it could scarcely be recognized; R. 56; unconsciousness continues; extremities feel rather cold, and cheeks also; enemata returned.

12:0, temp. 39.8°.

6.—2:30 a. m., temp. 39.8°; R. 36, irregular.

3:0, pulseless; heart's action feeble and tumultuous, but the sounds could be distinctly recognized; constantly tossing about, so that it was not easy to ascertain whether there was a cardiac bruit; the aspect and general symptoms seem to indicate the formation of clot in both cavities.

4:30, temp. 39.6°; R. 44, very irregular and shallow—expiration much prolonged; still pulseless, and unable to swallow.

6:30, too restless to have the temperature taken.

9:0, pulsation can be felt faintly in both brachials, but not below; lividity increases, but no stertor; pupils small.

11:0, temp. 39.1°.

12:30, about half a pint of high-colored urine drawn off, sp. gr. 1014, acid, faint cloud on heating, and not quite clear by nitric acid. He grew gradually worse, tossing to and fro, throwing up his hands, and rolling his head from side to side; his hands became very cold and livid, and at 3 p. m. his breathing was more labored and less rapid; the expiration at one time was very long, but about 3:30 it changed its character, whilst the inspiration became long and labored, both acts being free from stertor. About this time his face grew paler and colder, and he expired at 3:45 p. m.

The post-mortem was conducted with great care by Dr. Wickham Legg and Dr. J. Ormerod nineteen hours after death.

The following measurements were taken: from the left anterior superior iliac spine to top of left patella 44 Cm.; from right anterior superior spine to top of right patella 42 Cm. From left anterior superior iliac spine to left inner malleolus 83

Cm.; from right anterior superior iliac spine to right inner malleolus 88 Cm.

Left limb, half way between knee and ankle	25.6	centim.
Right limb.....	39.4	"
Largest circumference of left knee.....	30.6	"
" " " right knee.....	44.4	"
Girth of left thigh at a point half way between anterior superior iliac spine and patella.....	38.0	"
Do. right do.....	51.0	"

Nothing noteworthy was found about the heart. The lungs were œdematous, but no other morbid change was present. All the viscera of the belly were natural.

There was no obstruction or old thrombus found in the vena cava or iliac veins. The lumbar plexus on both sides was natural to the naked eye. There was no increase in size of the inguinal glands. The large size of the right leg seemed due to an increase in the subcutaneous tissues solely, not to the muscles. No other appearance of disease could be perceived.

Dr. Gowers examined the spinal cord with the microscope and found it quite natural.

Remarks.—The results of the post-mortem examination explain little or nothing, on account of our possessing insufficient data of the physiology, and still feebler knowledge of the pathology of the lymphatic system. There was no evidence from this examination of any obstruction to the femoral vein, and apparently no enlargement of the arterial or venous trunks, though it seemed highly probable that some great disturbance took place from time to time owing to the heat of the limb, pain and swelling, and especially those rapid local changes in the limb which ensued shortly after the fatal seizure. It may be said that the last attack was merely the severe form of many previous, but less formidable attacks. At no time was the urine chylous.

This case, in the character of the discharge, and large size of the limb, resembles those described by Mr. Sidney Jones ("Path. Trans." vol. xxvi., 1875), Mr. Berkeley Hill, and Dr. Cholmeley ("Clin. Trans." 1869), but it differs from these, and all I have

been able to meet with, in the increased length and growth of the bones of the affected limb. In the report furnished by Mr. Callender and Dr. Burdon-Sanderson, they say that "a perfectly similar case is recorded by Dujardin in 1854." Even in Mr. Thomas Smith's case of nævoid elephantiasis ("St. Barth. Hospl. Rep." vol. v.), where the enlarged limb was three inches longer than the sound leg, "the lengthening was due to the excessive hypertrophy of the integuments over the sole and heel."

This case would be placed by the systematic surgeon under the category of "lymphatic elephantiasis," Mr. T. Smith ("Nævoid Elephantiasis," "St. Barthol. Hospl. Rep." vol. v., 1869) having already distinguished three varieties of elephantiasis arabum—lymphatic, vascular, and climatic—the last being the swollen leg seen in tropical climates. Indeed, referring to my first report of this case, he has himself already reckoned it as an instance of the lymphatic variety of elephantiasis.

A CASE OF PUERPERAL CONVULSIONS, ATTENDED WITH RUPTURE OF THE UTERUS AND RECOVERY.

BY A. C. RANKIN, M. D.

(Read before the Central Illinois Medical Association, in May, 1878.)

On my return from the American Medical Association, at midnight, on June 9th, 1877, a messenger was waiting for me to visit Mrs. L., living eight miles in the country. Upon my arrival at the house, I found that Mrs. L. had been suffering from puerperal eclampsia since four o'clock of the previous evening. She was a large, powerful woman, aged twenty-three, and about seven months pregnant with her second child. She had had no trouble with her first confinement. Her spasms were very violent, and occurred at intervals of from fifteen minutes to one hour. She was unconscious from her first one, and violently

delirious between her convulsions, so much so that it required four men to hold her or to keep any clothing upon her. She was also suffering from general anasarca, which proved that her convulsions were caused by uræmic poison.

As it was impossible to get her to swallow medicine, I bled her very freely, but it made no impression whatever upon her convulsion or delirium. I pointed my finger nail and inserted it through the os and ruptured the membranes, in order to induce premature labor. I then went home for chloroform and obstetric case. Upon my return labor had commenced, and I assisted by dilating the os with my fingers. The dilation was slow and tedious. She had no convulsions while under the influence of chloroform, and her pains occurred at about every ten or fifteen minutes. After a few hours the chloroform gave out, and her spasms and delirium returned as violent as before.

June 10th. At 4 p.m. the os was dilated so that I could have performed craniotomy, but it was impossible to hold her hips still enough to render the operation safe. About one hour later, while I was oiling my arm, intending to turn and deliver, she took a violent spasm and pain both at the same time; suddenly both ceased, and she settled back in the bed in a collapsed condition. Supposing that she was dying, I applied ammonia to her nostrils, and poured whiskey into her mouth. As soon as respiration was established, I introduced my hand and found the child had passed through a rent on the left side of the uterus into the cavity of the abdomen to its armpits. Seizing the feet, I soon brought it to the world stillborn. The patient was meanwhile lying in a semi-comatose condition. Upon reaching for the secundines, I found them also in the cavity of the abdomen. After removing them, I introduced my hand, leaving my thumb in Douglas' cul-de-sac, and my fingers in the abdomen, and scraped out a quantity of blood and clots, cleaning the cavity of the abdomen as well as possible, and then replaced about a foot of the small intestines, which had escaped into the uterine cavity.

By that time the uterus had begun to contract. I kept the back of my hand against the rent, and held back the intestines. In about half an hour the uterus contracted so as to expel my hand. The rupture commenced about $2\frac{1}{2}$ centimetres above the

utero-vaginal connection, and extended up the left side about eight inches. At the time I removed my hand the rent was between 6 and 8 centimetres long.

June 11th. Returned early in the morning; found patient quiet but still unconscious, having had no convulsions since she was delivered of the child; pulse 67. She was still suffering from the shock; would eagerly swallow anything placed in her mouth, and appeared hungry. Ordered beef tea, and a little hot water and whiskey. Remained with her all day; by evening she had rallied somewhat; pulse 80.

June 12th. Patient had become conscious during the night; pulse 90; complained of pain in left inguinal region; ordered a turpentine stupe, and gave morphine with quinine.

June 13th. A large dose of oil was given to her in the night without my knowledge; however, it operated without doing any apparent harm; pulse 105; pain in her side about the same; a cake as large as my hand had formed at the seat of the pain. Ordered acetate of potassa, and continued the morphine and turpentine stupes.

June 14th. Was called in the night; arrived at 3 a.m.; pulse 135; abdomen very much enlarged and tympanitic; she was suffering from general peritonitis. I made a solution of tincture of veratrum viride with water, and gave her a teaspoonful every hour. In four hours it reduced her pulse to less than 100. I then gave three centigrams of morphine every two hours. The second dose relieved her pain, after which the dose was reduced and given every two to three hours, alternating with the veratrum. I had her sponged off twice each day, her bed kept perfectly clean, and her napkins saturated with a solution of carbolic acid. I remained with her all day, watching the effects of the veratrum, and keeping her pulse at from 95 to 100. Her stomach remained in good condition, retaining medicine and nourishment.

June 15th. Patient worse; bowels very tympanitic and tender; pulse 110; stopped morphine and gave rhubarb and bicarbonate of soda. It operated by noon, greatly relieving the tympanitis. Soda and morphine were next given, and turpentine stupes continued.

June 16. Pulse 95; bowels reduced but still tympanitic. Cake still in left inguinal region.

June 18th. Patient had a chill but no fever, and slight rigors during the day. Cake in her side soft and fluctuating.

June 19th. Had a cold, clammy sweat; gave whisky and quinine.

June 20th. An abscess broke, and about four ounces of thick pus were discharged *per vaginam*. Cake in her side had disappeared.

June 21st. Patient evidently convalescent. From this time she improved and made a good recovery. Her dropsy had gradually disappeared.

In December, 1877, she aborted at about the third month. No physician was called, and I have not learned the particulars. I have seen her since, however, and she appears to be in good health.

P. S. Since the above was read, I was called Oct. 31, 1878, to see Mrs. L. I found her in labor; in a few hours she was delivered of a healthy child, weighing seven pounds. Her labor was natural, pains regular and quite severe, but two of them being required to expel the child after its head had passed the uterus.

THE HORRORS OF TEETH FILLING, with the preliminary gouging and filing, are to many so unpleasant that they prefer the pain of extraction to the annoyance of filling. In future, they may take their choice without the necessity of a sacrifice of the tooth, if they prefer extraction. Dr. Weil, of Munich, has employed and advocated the method of first extracting the tooth, filling it with gold or amalgam, and then replacing it. He states that the results are excellent, and the teeth can be freely used. He keeps the tooth out of its socket for one or two hours, as may be necessary, and yet the tooth is ultimately firmly fixed. The method is applicable to both bicuspid and molars, and will probably be chosen by many persons, provided it is found as successful in other hands as in those of the inventor.

Clinical Reports.

NOTES FROM PRIVATE PRACTICE.

Is the Bite of the Heterodon, or Spreading Adder, Venomous?

If this question were asked of a body of herpetologists, there would be but one answer; but if the medical profession were interrogated, two very positive and diametrically opposite responses would be made. So far as my observation goes, the great majority of the latter would respond in the affirmative. For example, of thirteen of the most prominent physicians of this vicinity to whom I have put this question, every one affirmed that the wound inflicted by the heterodon (or spreading adder) was venomous, and that they had never known of a contrary opinion being held. Although none of these gentlemen had treated a case of poisoning by this reptile, all had heard of cases; and yet, when the reports of such cases were thoroughly investigated, no positive connection between the supposed cause and the actual result could be demonstrated. One of the reports, on which such a belief was based, was related to me by three of the thirteen physicians referred to above, each giving the circumstances quite differently, but, of course, as he had heard them vouched for by others. All appeared equally positive that a death had been caused by the bite of a spreading adder. The details of this case, as I afterwards obtained them from the family, were these: Two boys, aged 8 and 16 years respectively, were walking, barefooted, on a prairie in which the grass was very thick and high. While thus engaged, they heard a "rattling noise" close by in the grass, which at the time very much alarmed them. After reaching home, the younger boy was suddenly taken ill, and during the next 24 hours died. A

small scratch was discovered on the left foot, which was somewhat swollen.

It so happened that on the same evening when the boys were on the prairie, and near the place where they were frightened, a spreading adder was killed.

These two facts are all the evidence there is to prove the case. The symptoms, described from memory by the parents, are those of some injury of the nervous centers, such as that of insolation, the latter being very probable, as the accident occurred upon one of the hottest days of summer.

Comment upon the history given above is quite unnecessary; yet it is on such evidence that it is generally believed throughout the country, for miles around, that Mr. D—— lost a son from the bite of a spreading adder. I might refer to other reported cases, but this is the only one I have investigated in which there was a shadow of evidence.

Of SPREADING ADDERS, Prof. E. D. Cope recognizes two species and two sub-species that occur in the United States (*Heterodon platyrhinus* and the sub-species *atmodes*, and *H. simus* and the sub-species *nasicus*). Both species are ovoviviparous; all flatten the head and hiss furiously when angry. They are known by the various names of *Spreading Adder*, *Blowing Viper*, *Hog-nose Snake*, *Black Viper* and *Spotted Viper*.

It is a universally recognized fact among naturalists, so far as I have been able to learn, that none of the species are venomous. Profs. Baird and Girard, in their "Catalogue of North American Reptiles," say of them: "All the species exhibit a very threatening appearance when alive, in flattening the head, hissing violently, etc., but are perfectly harmless." Prof. Jordan says (*Manual of the Vertebrates of the Northern United States*): "A very variable species; when angry, it depresses and spreads the head, hissing furiously, thus exhibiting a very threatening appearance, but it is perfectly harmless." Prof. E. D. Cope, in a private letter, makes a similar remark. A thorough examination of the mouth of these serpents fails to reveal a trace of poison fangs.

In conclusion I submit the following observations:

I. In June, 1876, I put a mouse in a box with a medium-

sized spotted spreading adder; the latter immediately attacked the mouse, striking him a number of times, once producing a flesh wound in the jaw; the reptile soon, however, straightened up his head, and became quite reconciled to his companion. It now was the mouse's turn, and he proceeded to revenge himself by commencing to eat up his antagonist. Beginning at the tail, he ate nearly two inches of the snake in the course of an afternoon, without encountering any further resistance. The next day the mouse was as lively as usual.

II. I put a grown cat in a box with two large black spreading adders; they immediately attacked and struck the cat several times, and then became quiet.

III. The next day I put a half grown chicken in the same box; they struck it several times, but neither chicken nor cat showed any signs of poisoning.

IV. My friend Mr. F. Stein, while putting a large spotted spreading adder from one box to another, was struck by it on the back of the hand, making a scratch nearly an inch long; the wound healed without one untoward symptom.

I should mention one of the habits of this reptile which does not seem to be generally known; it is that of feigning death. I have frequently struck them rather severely with a switch, when, after making futile efforts at attack, they would seem to bite themselves (which they really never do), and then turn on their back as if dead. A few moments of quiet are all that is necessary to revive them, when they will turn over and beat a hasty retreat.

J. SCHNECK, M. D.

MT. CARMEL, ILL.

A Case of Symmetrical Gangrene of the Fingers.

On the 15th of June, 1878, Mr. D. T., formerly a farmer, but not now engaged in business, aged 75 years, was attacked with bilious fever, in the early stage of which an old inguinal hernia became strangulated. The usual manipulations were made, and failed to reduce it, but in a second attempt made on the evening following were successful.

His liver was torpid, and a jaundiced condition supervened,

with feeble pulse, a deranged and depressed condition of the whole system, and a disposition to diarrhoea.

He was put upon quinia, mercurials, diaphoretics, etc., until the subsidence of the fever, when he was given muriatic acid, with bitter tonics and iron, under which he improved so much that after about three weeks from the attack it was not thought necessary to continue attendance.

July 27th, called to see him again, found him sallow and depressed, his lower limbs oedematous. He said this swelling had been coming on for two weeks; pulse feeble, urine scanty, and high-colored, and diarrhoea. Upon examination of the heart, the first sound was found nearly normal, but the second was prolonged and rasping, indicating defective closure of the semilunar valves, probably due to partial ossification. He was given an infusion of digitalis, with potassium iodide and syrup of squills; also carbolic acid, tincture opium and bismuth for his diarrhoea.

The secretion of the kidneys became free and the swelling of the limbs diminished; otherwise his condition continued about the same for a week, when intense pain began in the second, third and fourth fingers of the right hand, extending up his arm to the shoulder. This pain was continuous, but much increased at night.

In a few days the tip of the third finger became livid, and soon after was gangrenous.

Carbolized oil, flaxseed meal poultices, with laudanum and various other applications, were made till it became gangrenous, when it was enveloped in brewer's yeast. The tip and the front side, as far up as the second metacarpal articulation, became sphacelated, and remained in this condition for a little time, when a line of demarcation began to form.

This line of demarcation deepened until the 24th of September the slough with a shell of the bone of the third phalanx were removed, leaving a healthy granulating surface. The reparative process went on slowly but kindly till the middle of October, when it was completely healed. A few days after the slough was removed from the finger of the right hand, the same severe pain began in the thumb of the left hand. The end soon became

livid and afterwards dark purple. It was promptly enveloped in yeast well carbolized. This pain continued with greater or less severity for about a week, when it gradually subsided. The skin sloughed off, and the part healed.

October 30th, patient in fair health, is able to walk two or three miles a day, and says he enjoys life almost as well as he did in his younger days, only complaining of pain and swelling below the knees.

In Von Ziemssen's Cyclopedia, vol. vi, art. Chronic Endarteritis, page 383, we find a description of similar symptoms, due to disturbed circulation on account of disease of the arteries, and called symmetrical gangrene, because the arterial disease is bilateral.

J. T. STEWART, M. D., and

PEORIA, ILL.

NOBLE HOLTON, M. D.

A Case of Traumatic Tetanus.

Manuel Arrsend, a creole boy, aged 11 years 9 months, was attacked by tetanus on the 16th of September, 1878. I was called on the 19th, 2 p. m.

The boy had picked up a splinter with his left foot on the 8th of September. The splinter had been extracted by his grandmother, an old lady of about 65 years of age, the wound washed, bandaged up with rags, and left to take care of itself. Healed well.

When I arrived at the house, I found traumatic tetanus well developed. Urine very scanty and highly colored; about $3\frac{1}{2}$ oz. were let in 10 hours; skin hot and dry, pulse 136, temp. 39.5, respiration 30, great rigidity of all muscles.

I opened the bowels with the following injection, as they had not moved once in three days:

R̄ Extr. sennæ liquidī, salis amari, āā, 25.0

Aq. menthæ pip. 200.0, M. D. S. enema.

Use one-half at once, the rest in 2 hours.

The following mixture was also prescribed:

R̄ Potass. bromid.....	15
Hydrati chloralis.....	8
Aquæ menthæ pip.....	120

M. D. S. Tablespoonful every 2 hours, or when required.

The enema was administered at once, and operated three times well. The mixture I administered myself. Putting one corner of the mouth gently aside by means of the handle of a teaspoon, I succeeded in making the patient swallow two tablespoonfuls at once, dropped slowly between teeth and lips. Spasms allayed almost instantly. A flax seed poultice (hot) was ordered to the cicatrix of the wound. On my return at 7 p. m., I found the patient quiet. Pulse 136, temp. 39.5, respir. 30.

Sept. 20th, 7 a. m. The patient had passed a quiet night; spasms were promptly controlled by chloral. Passed seven ounces of urine; urine red, otherwise natural. Pulse 128, temp. 39.2, respiration 30.

As a drink I ordered carbonic acid (Seltzer) water; also, the following liniment:

R̄	Tinct. radicis aconiti,	
	Chloroformyli, āā.....	15
	Spir. camphoræ	100

M. D. S. Sponge body and limbs every 3 hours.

Five p. m. Patient complained of burning whenever the liniment was applied. This was, therefore discontinued, and the following salve used in its place:

R̄	Ungti mercurialis cinerei (fortioris).....	8
	Extracti belladonnæ.....	4
	Ungti camphoræ.....	30

M. ft. ungt. S. Apply 4 grams to the abdomen every 3 hours.

Sept. 21st, 7 a. m. Patient had passed a good night; had urinated twice naturally. Temp. 38.8, pulse 118, respiration 26. I ordered the following mixture:

R̄	Extracti physostigmatis venenosi	0	07
	Pulv. gi. mimosæ, qs.		
	Aquæ menthæ piperitæ.....	100	

S. Teaspoonful every two hours.

The ointment was discontinued, and the liniment used again. Muscles still rigid.

Five p. m. The patient has been in a continual slumber since this morning. He was easier this evening than at any time previous. Muscles of the face less rigid. I ordered Liebig's beef-

tea. The liniment had to be discontinued again and the ointment used.

Sept. 22d, 7 a. m. Patient had rested well during the night; urinated twice naturally. Pulse 112, temp. 39.2, respiration 26. No pain; deglutition quite easy. 5 p. m. No change since morning; everything continued.

Sept. 23, 7 a. m. Patient had rested well, and could separate his teeth sufficiently to make the tip of his tongue protrude. Muscles in general less rigid; no pain. The bowels were opened by injection, as before. Profuse epistaxis had set in at 5 this morning, which lasted about half an hour. Temp. 38.6, pulse 106. Previous treatment continued. 5 p. m. No change since this morning. Patient urinated naturally at 4 p. m., and had two operations of the bowels, which were natural. Beef tea and mineral water continued; chloral mixture decreased to half doses.

Sept. 24, 7 a. m. Profuse epistaxis at 1 a. m.; the blood was very dark. Slight twitching of the muscles was noticed and promptly allayed by a full dose of chloral. The patient could open his mouth fully 3 centimetres, could flex and extend his legs quite easily, and carry the feeding cup to his mouth without help. He urinated several times naturally. Pulse 106, temp. 38.6. 2 p. m. Patient had slept three hours since this morning. I visited him once more at 7 p. m., and finding him getting along well, ordered former treatment to be continued.

Sept. 25th, 7 a. m. Profuse epistaxis at 4:30 a. m. Patient could protrude his tongue one-half inch, and separate his teeth fully two lines. He had urinated naturally during the night, and was able to flex and extend arms and legs freely, and to change his position in bed without help. Temp. 38.6, pulse 106. I called again at 12 m. and 7 p. m. No change.

Sept. 26th, 7 a. m. Patient had passed a nice night; passed fæces and urine naturally. Temp. 38.4, pulse 102. He could separate his teeth 7 centimetres. I called at 2 and 7 p. m., and ordered former treatment to be continued.

Sept. 27th, 7 a. m. Found patient sitting up in bed. Had urinated three times and defecated once naturally during the night. Temp. 38.4, pulse 102. He could eat biscuits and milk;

muscles of face greatly relaxed. Abdomen still hard, but not tender.

Sept. 28th, 7 a. m. Patient still doing well. Could separate his teeth $7\frac{1}{2}$ lines, and masticate small pieces of cracker. Temp. 37.8, pulse 96.

From this on the patient continued doing well, and could walk across the room with very little assistance on the fifteenth day of medical treatment, viz., Thursday, Oct. 3d. I put him on lactate of iron and cinchonidia, beef tea and light but strengthening diet, and allowed moderate exercise. The hardness of the abdomen soon yielded to an ointment composed of 0.25 grams extract of physostigma venenosum, and 30 grams camphor salve, and Manuel Arrsend will attend his school as usual, as soon as it opens.

GUSTAV KEITZ, M. D.

666 NORTH RAMPART ST.,

NEW ORLEANS, LA., Nov. 4th, 1878.

A case of Alopecia.

During my attendance on a family living near this city, my attention was called to one of the children, who had for years suffered from alopecia, and as it presented some interesting peculiarities, I have thought it worth while to make note of it, with the hope that some of the readers of the JOURNAL AND EXAMINER may throw some light on its cause.

The patient, if I may call her such, is a very bright girl of eleven years of age, exhibiting in all respects the intelligence and characteristics of any healthy child of that age, and was, as her mother informed me, very forward in her studies at school. When between four and five years old her hair, which was very thick, long and curly, and of a dark brown color, commenced to come out in patches all over her head, leaving the head perfectly bald in these places, which varied in size from a kernel of coffee to that of one of the old fashioned pennies. In a little while the hair would be replaced in these spots and her head would look as well as before. This alternate falling out and replacing of the hair occurred, the mother says, two or three times, and finally was followed by the loss of all the hair, which came out gradually, leaving the head perfectly smooth and bald.

At the present time the child's head resembles very much that of a man of seventy years, who became bald before his hair turned gray. Over the ears, and extending from ear to ear around the base of the head there is a slight growth of silvery white hair, varying in length from half an inch to one inch and a half. The crown of the head is perfectly smooth and bald, the hair follicles looking very much as they do when they have become atrophied from old age. At the point where we would look for the posterior fontanelle there exists an oval depression into which the end of the first finger can be placed. There is, however, a perfect floor covering the membranes of the brain at the bottom of this opening, and it seems as if only the inner table of the skull had united, leaving the outer table open. Otherwise the head is perfectly normal. The most singular thing about the case is that there was no apparent cause for the loss of hair. The mother has no recollection of the child's having any fever or other disease previous to or during the time it suffered in this way, and says that she has always been very healthy.

The parents are both healthy, and present no symptoms of specific disease. They have seven other children, all of whom are healthy in every respect, and they can give no information which will explain the cause of this singular attack of alopecia.

S. W. GILLESPIE, M.D.

STERLING, ILL.

[This is evidently a case of alopecia areata, or area Celsi, due to perverted innervation, most often encountered in children, the treatment for which is described in every good treatise on skin diseases.—ED.]

Three Cases of Molluscum Contagiosum.

In the May number of this journal is a paper by Dr. G. H. Fox, of New York, entitled, "A Clinical Study of Molluscum Contagiosum," with a report of twenty-five cases. As it has fallen to my lot to have seen, within a year, three cases of this rather rare complaint, I have thought it worth while to put them on record, especially as two of them exhibited peculiar features.

CASE I. A little girl was brought to the Eye and Ear Infirmary last winter with a single molluscum near one external

canthus. No history of contagion was obtained. It was removed by Prof. Holmes, and the case disappeared from observation.

CASE II. J. M., æt. 41, came to my dispensary clinic last January for advice and treatment. He said that several months before the present visit he noticed several spots about his neck which were tender to the touch, and whose presence annoyed him. Soon there was elevation of the skin, and after a while he noticed at times a discharge from little openings in the elevated patches. Without causing positive pain, there was a constant feeling of discomfort, and the contact of his clothes with the parts seemed to irritate. Upon examination, several flat, sessile tumors were seen scattered about the neck, especially on the sides, varying from 3 m. m. to 3 c. m. in size. About the center of each of the smaller ones was apparently an opening, while the larger presented several openings, from which either protruded or could be easily expressed the characteristic whitish, curdy contents. No specific history could be obtained, nor anything which could throw any light upon the trouble; he was apparently, otherwise, in excellent health.

An ointment of iodine was prescribed, and no prognosis ventured upon. At a subsequent visit the application of iodine seemed to have been of some benefit, and I desired to give it a fair trial before resorting to the knife or cautery. I sought the counsel of Profs. Davis and Andrews, however, and they both recommended final resort to operative measures. I explained this to the patient, but he never reappeared for further treatment.

CASE III. W. J. C., æt. 18, American, applied also, during August, at the dispensary for relief. He presented a very cachectic appearance. He had been under the care of different physicians of the city. He stated that he had had diabetes for about seven months. Examination of the urine confirmed this statement. Said he had lost some 1.5 kilog. within a year. The average amount of urine passed during the 24 hours was about twelve litres. Every winter he has had an itching of the skin, without eruption, unless he scratched himself (urticaria?), but last winter was annoyed more than usual by this trouble. During last winter, also, wart-like growths appeared scattered

over his legs, and since then have increased in number and size. He had, at time of examination, from fifty to seventy-five of these growths on each leg below the knee, a few on the thighs, and one or two on the neck and chest. They presented the typical appearance, but were rather sessile, of size varying from that of a pea to that of a dime; one or two of them breaking down and forming ulcers. He stated positively that some of them had from time to time disappeared, while other and fresh ones made their appearance. The mollusca were all quite tender, and occasionally painful. In addition to the above, upon examination of the genitals, a marked condition of phimosis was found. Opportunity was not afforded to trace any possible connection between this latter difficulty and the diabetic cachexia. There was no history or indication of syphilis, either hereditary or acquired. He was put on tonic treatment, and circumcision strongly recommended; but the patient declined the latter measure, and disappeared from observation.

It is very unfortunate that these cases could not have been watched and their progress noted, but the mere suggestion of operative relief seemed to frighten them away. Case III. was seen with me by Dr. Hyde, who approved the treatment and recommendations.

By this simple report I have endeavored only to put these cases on record, and have conscientiously avoided saying anything about their pathology. In none of them could it be learned that others of the family or neighbors were similarly affected.

ROSWELL PARK, M. D.

CHICAGO, ILL.

THE HOSPITALS OF PRUSSIA IN 1877. According to the statistical report for 1877, Prussia had 643 public general hospitals, with 27,633 beds; 244 private general hospitals, with 7,906 beds; 53 public insane asylums, with 12,791 beds; 73 private insane asylums; 7 public eye infirmaries, with 167 beds; 25 private eye institutes, with 484 beds; and 31 public and 57 private lying-in hospitals.

Society Reports.

TRANSACTIONS OF THE CHICAGO GYNÆCOLOGICAL SOCIETY.

First regular meeting, October 25th, 1878.

DELAASKIE MILLER, M. D., in the chair.

Dr. W. H. Byford read a paper on Dermoid Tumors of the Ovary,* of which the following is an abstract:

The paper included the histories of four cases, under the reader's observation, which were unlike in certain particulars. In Case I, an eighteen-year-old girl was tapped, for abdominal distension, in October, 1875; she had noticed her size increasing since the spring of 1874. Ten litres of a clear, slightly-bluish, somewhat tenacious fluid were drawn, which contained the ovarian cell. Ovariectomy was performed Jan. 4, the tumor having rapidly refilled in the meantime. Only a clear serum flowed through a Wells' trochar, but upon being opened, some 250 grams of sebaceous fat was found in the sac. The interior of the cyst was smooth, except at one point where an area as large as one's palm was depressed $2\frac{1}{2}$ ctm. below the neighboring surface, and covered with a crop of brown hair about $2\frac{1}{2}$ ctm. in length.

Case II was that of a woman forty-three years old, mother of one child aged eighteen years. Ovariectomy was done June 28, 1876, ten months after she began to notice an increase in her size. She was as large as a woman at term. The wall of the cyst was thin, except at one point where it contained a thick layer of adipose tissue, and was there 12 m. m. in thickness.

*The reader stated that he had presented the paper at the last meeting of the American Gynæcological Society.

Upon this area grew an abundant quantity of blonde hair, which was matted together in a mass as large as an orange. The hairs were from 16 to 40 ctm. long when straightened. The fluid was a thin serum, in which floated 320 to 380 grams of sebaceous fat, in considerable masses.

Case III was that of a woman thirty-three years old, mother of four children, the youngest aged three years. Ovariectomy was done April 7, 1875, about nine months after the abdomen began to enlarge. The wall of the cyst in three-fourths of its extent was thin; in the remaining portion, including that situated over the pedicle, the wall was made up of dense areolar tissue, which contained many cylindrical pieces of bone, varying in length from 2 to 5 ctm, and from 3 to 5 m. m. in thickness. They were loosely imbedded in the tissue. This loose areolar tissue had a tegumentary covering, to which more than a hundred imperfect incisor teeth were so slightly attached that they could be scraped off with the finger nail. Short, blonde hairs also sprung from this covering, interspersed with the teeth. The cyst contained some 10 litres of fluid, with several grams of yellow, sebaceous, fatty matter.

Case IV, thirty-five years old, mother of four children, the youngest twenty months old. Ovariectomy was performed June 18, 1878. The growth was first noticed nine years before. Upon tapping the cyst, at the operation, nothing but a sticky, greasy matter escaped. The cyst was divided by complete septa into three nearly equal compartments. Each space contained a ball of hair as large as a lemon, in which the fatty matter was intermixed. One ball was of blonde, another of red, and the third of gray hair. The hair on the woman's scalp was dark brown. Some of the hairs were 50 ctm. long, and all sprang from a tegumentary membrane resembling the scalp. By the side of the dermic patch, was a layer of loose areolar tissue, 4 ctm. thick, which contained pieces of bone in a variety of shapes and sizes. Upon this latter area of tissue, in each division of the cyst, was a half arch of teeth, resembling one half of the upper jaw. In one instance, the teeth projected above the surface, but were covered, in the other two spaces, by a thin covering, so soft that it could be removed with the fingers. Each

arch contained an incisor and three molars; two of the latter were shown.

In all these instances there was an absence of adhesions of the tumor with the abdominal walls, and of all other serious complications. The patients all recovered.

The reader defined a dermoid tumor to be a cyst whose lining was wholly or in part a tegumentary membrane. It may be found in any region of the body. The usual contents of these cysts are the products of the skin: hair, sebaceous fat, and perspiratory fluid. Teeth, bones, muscular, nervous and even brain tissue are also found, but with less frequency. The latter are usually covered by the dermic tissue, or are found beneath that part of the cyst wall not lined by the dermic membrane.

Concerning the origin of these tumors, the reader said that the theories which had been advanced to explain them, in some degree represented the state of physiological science of the period. The explanation which to-day seemed, at least, physiologically plausible, had reference to the early days of the embryo, when, in some manner, an indentation of the external blastodermic layer becomes included in the anomalous situation, and there completes its development with the formation of hair, etc. The reason why these tumors are of greater size in the ovary than elsewhere, may be found in the nervous and vascular activity of which the organ is the seat; and this explains why a dermoid cyst of the ovary is often undiscovered before puberty, when the organ is comparatively inactive.

DISCUSSION.

DR. JACKSON said he trusted that this society would never become one of mutual admiration. Its objects were of a much higher character—the principal one being the mutual benefit of its members. He mentioned this in order that he might not be misunderstood when he said that he felt himself fortunate in having the privilege of listening to the really excellent paper of Dr. Byford. He confessed that it had given him a clearer understanding of the subject of dermoid tumors than he had ever had before. The paper was very remarkable in many respects. Dr. Byford had been unusually fortunate in having the opportunity

of seeing and treating so many as four cases of this really rare disease. Spencer Wells, in 500 cases of ovariectomy, had found that only nine of the tumors removed were of the dermoid variety; Atlee, in 400 cases, found six; and in a table given by Peaslee of 61 cases, only one was dermoid. Taking these as a basis for calculating, the percentage of dermoid tumors to other tumors of the ovary, was not more than $1\frac{1}{2}$ or 2. As Dr. Byford's opportunities had been great, so also had he made the very best use of them. But the mysteries surrounding the subject had not by any means been cleared up. One of them related to the extraordinary number of teeth sometimes found in these tumors. Schnabel, quoted by Wells, instances a girl aged 13, in whom was an ovarian cyst of large size, containing three pieces of bone and more than 100 teeth; Paget also mentions a case in which the cyst contained over 300 teeth. How can this be accounted for? If the teeth are produced from bone in the ordinary manner, how is it that these pathological specimens in which are found only small pieces of bone and patches of tegumentary tissue, can produce so many more teeth—some well developed—than are found normally? And what is the explanation of the fact that the hairs found in dermoid ovarian cysts are so frequently found in the form of masses or balls? He would like to inquire whether, when on tapping a cyst we found the whole or a portion of the fluid removed become of the consistence of butter, we could be safe in assuming that the tumor was of the dermoid character.

DR. NELSON: The theory proposed to account for the formation of dermoid tumors certainly seems a reasonable one, if we remember the number of organs or parts of organs normally formed by involution of the blastodermic cells, as, for example, the crystalline lens of the eye, from the epithelial cells of the skin; the enamel of the teeth, from the same cells which form the epithelium of the mucous membrane of the mouth; the hairs and the glands of the skin from the same cells which form the epidermis; and especially the Graafian follicles of the ovary from the same cells which cover the peritoneum. If we remember also the numerous grooves and folds, fissures and processes formed in the blastodermic membranes during the development of

the face, we need not be surprised to find this region a frequent seat of dermoid cysts. And especially will the development of the Wolffian bodies and their successors, the ovaries and testes, account for the frequent location of these tumors in this region. The Wolffian body is developed from cells in the middle blastodermic layer, just beneath the external blastodermic layer, which finally forms the skin and its appendages. It then descends toward the peritoneal cavity, carrying with it the external blastodermic layer sufficiently to form a groove, and thus aid in forming the Wolffian ridge from which the lower limbs are to be finally developed. This possibly accounts for the finding of these tumors occasionally in the thigh, the involution having really occurred at the Wolffian body and been carried downward in the wonderful development of the lower extremities at this period, instead of following the Wolffian body to the region of the testis, ovary or kidney. So we may consider these dermoid tumors a kind of complement to that other freak—cleft palate and hare-lip—the one a deficiency of blastodermic development and the other an excess.

DR. MERRIMAN thought Dr. Byford's method of bringing out these theories was very interesting; so also was the fact to which he called attention, that "these theories represent with some degree of exactness the physiology of the times in which they originated." The *scientific theory* given, certainly best explains the development of these strange cysts; but many puzzling facts are left unaccounted for, even in this theory. For example, it would naturally be expected that if the blastoderm had a definite constructive duty to perform, and a part of the membrane should be shut off from work with the rest, then the remainder would do an incomplete work, and the foetus would be deficient in some respects. Or, on the other hand, if so small an amount of the blastoderm is included in the cyst that its loss is not missed in the construction of the foetus, why then is there found in these cysts such immense development of some tissue which is generally supposed to be produced in the human body *only within a certain definite limit*. For instance, he was present at one of Dr. Byford's operations—not mentioned in this paper—when he found nearly a hundred teeth, more or less perfect, imbedded in

the walls of the cyst. Dr. Byford will remember the case. Why should that trifling indentation in the blastoderm produce larger quantities of this tissue than is produced by the whole blastoderm in the fully developed body. These things are an enigma.

DR. SAWYER: I do not presume to be able to add to the stock of knowledge which has been laid before the society in the paper just read. I only desire to remark that the differentiation of a dermoid tumor from those tumors which are known as monstrosities by inclusion, cannot, in all instances, be established. Many instances of the latter forms of tumor have become historical: notably the case of the man in France, who bore a large tumor of the scrotum. Coming under the observation of Velpeau, this remarkable diagnostician exclaimed, in a manner characteristic of his race, "My friends, that tumor is the man's brother," which, in fact, it proved to be. A second instance is that of the Chinese, from the anterior surface of whose thorax a second child sprouted; at birth this was as large as the first. A cast of this monstrosity, which is preserved in the Warren museum, at Harvard, represents this second child as having leaped into the thorax of the first. A third remarkable instance occurred to Dr. Joseph Pancoast, of Philadelphia, who removed a cystic tumor from the cheek of a very young child. The cyst contained a monster which, at the time of its removal, was growing faster than the independent child.

Monstrosities of this kind are usually regarded as quite distinct from the tumors described in the paper. The presumed point of departure being, for the subject of a dermoid tumor, that some portion of the individual's own external blastoderm has descended into, and been included, and shut off in some one of the numerous fissures which are found in the early embryo; while in a monster by inclusion, the entire or a portion of a neighboring embryo has been in a similar manner imprisoned in an embryonic fissure.

It is a curious and, perhaps, significant fact, that in these imprisoned monsters there is a tendency to an exaggerated development of the hairy portions of the integument and of the teeth. The cyst in Pancoast's case also contained much fatty matter. These and other facts have led Dr. Atlee, in his work, to describe

monsters by inclusion in the same chapter with dermoid tumors. For the same reasons, other observers have thought it proper to look upon all dermoid tumors as instances of monstrosity by inclusion.

DR. EARLE said in regard to the accepted theory of the formation of these tumors, that it was exceedingly difficult for him to understand one step in the process. If these growths are the result of a depression of the blastoderm, which is finally severed from its proper place of development, how and why is it that in nearly *every case* this depressed portion is from that part of the blastoderm upon which teeth and hair especially are developed? Or, if this depressed portion is not from the same part of the blastoderm, shall we conclude that any depressed part of this membrane which is cut off from its proper place of growth has a tendency to develop teeth and hair?

DR. MILLER: I have been much interested in the paper read this evening. The history of the cases is instructive, and the deductions are ingenious. There are some points, however, relating to the genesis of dermoid cysts, which still remain occult. Would it not be pertinent to raise the query, whether dermoid tumors originate only by the inclusion of a portion of the blastoderm proper to the embryo? This theory may be accepted as a reasonable explanation of the origin of some.

There appears to me good reasons for believing that an embryo in the early stages of development may include another ovum, the development of which continues only for a limited period, and it may thus furnish the characteristic contents of a dermoid tumor. In the retrograde metamorphosis that ensues, it would be natural for the softer tissues to yield first to the changes, and the more resisting structures, such as teeth, bone, hair, nerve, etc., to remain. It is no disparagement to confess that much of our knowledge upon this subject is hypothetical.

DR. BYFORD, in rising to close the conversation on his paper, said that he felt highly complimented at the manner it was received, and felt justified in reciprocating the encomium conferred upon it by expressing his satisfaction at the intelligence with which the members had criticised this abstruse subject. He acknowledged, in response to Dr. Jackson's remarks, that

although the theory he had adopted was the most satisfactory in the present light we had, many of the minor points connected with the structure of these tumors could not be explained. Why there was so great a redundancy of teeth for so small a space and matrix for development, he could not say. He thought, however, the matted condition of the hair could be easily explained. The hair is matted, not rolled together, and each hair may be straightened out by simply taking hold and drawing it up. When we remember that while the hair is growing the fat is being secreted and entangling it, and thus preventing it from assuming any other than a matted condition, the explanation becomes evident. He would not hesitate to pronounce a tumor dermoid from which a fat flowed, at first fluid, and afterwards became solidified. At least he had always found this coincidence to be true evidence in favor of that sort of tumor.

Dr. Nelson has elaborated the theory from the standpoint occupied by the physiologist, in a manner that gave him great satisfaction. The remarks in this connection, he thought, must be accepted by the society as reasonable, and in accordance with the teachings of that branch of our science to which he has devoted himself.

In reference to what Dr. Sawyer said of monstrosities by inclusion, Dr. Byford believed that there might in certain cases be great difficulty in distinguishing between dermoid tumors and these engulfed monsters, during the life of the patient, and before they were removed, especially in the cavities of the body, or even when situated externally. He thought, however, that after the tumor had been removed, either during the life of the patient or *post mortem*, a careful inspection of its contents would remove all doubt as to its nature. In monstrosities by inclusion, the bones of the skeleton were sufficiently developed in shape and placed in their proper relation to admit of no doubt of their identity. The best instance of this description of heterotopy he remembered to have seen is to be found in Dr. Atlee's work on "Diagnosis of Ovarian Tumors." The dissection was made by Dr. Grant, and represented a fetus so correctly that it would readily be recognized. In dermoid tumors, however, none of the bones are developed into unmistakable examples of femurs,

humerus, maxilla or other bones in the skeleton. No development from the middle or inner layer of the blastoderm was complete, while some of the products of the external, or dermoid lamina were sometimes anatomically perfect, as the skin, hair and teeth.

It would not be strange to find, and probably if the possibility was borne in mind in making the investigation there would generally be found a continuation of the two, as the blastoderm of the including individual would be depressed at the point where the included ovum had been engulfed. There might, therefore, be a redundancy of hair, teeth and sebaceous fat produced by the dermic tissue, lining the cavity which accommodates the included foetus.

In conclusion, the Doctor thanked the society for the interest manifested in his paper.

MICHIGAN STATE BOARD OF HEALTH.

(Reported for the Chicago Medical Journal & Examiner.)

The regular quarterly meeting was held in the office of the Secretary of State, at Lansing, Tuesday, Oct. 8, all the members being present, as follows: R. C. Kedzie, M. D., Prest., of Lansing; H. O. Hitchcock, M. D., of Kalamazoo; Henry F. Lyster, M. D., of Detroit; Hon. LeRoy Parker, of Flint; Rev. D. C. Jacokes, of Pontiac; and Henry B. Baker, secretary, of Lansing.

Rev. D. C. Jacokes, committee on buildings, heating, ventilation, etc, mentioned experiments in progress with regard to a plan of ventilation applicable to houses already built, on which he should be able to report at the next meeting. He had given illustrated lectures in a town in this State, and secured the construction of a chimney with ventilating flue, as recommended by Dr. Kedzie in the first annual report of the board, in a church where patent ventilating machines had failed; and the same plan would also be tried in private houses in that town. In this way he hoped to secure practical methods of ventilation "for the million." He had visited a house so constructed and shaded that

scarcely a ray of direct sunlight could enter, and in which seven of eight children had died. He had visited, by authority of the board, several large ecclesiastical gatherings, and spoken on subjects connected with the work of this board, and through them had distributed important documents to all parts of the State.

Dr. Lyster, committee on climate, presented the introduction of a paper on the topography and climate of Michigan, illustrated with diagrams showing isothermal lines, rainfall, elevation of localities, distribution of woodland, frequency of storms, etc. It is to be completed for publication in the annual report.

Hon. LeRoy Parker, committee on legislation for public health, read a paper on coroners and coroners' juries, showing the former dignity of the office of coroner, and stating that the jury were originally summoned principally as witnesses. He traced the growth of the system of coroners' juries, showing the origin of some abuses and the extent to which the system has been degraded, and clearly exhibited the need for expert medical ability on the part of the coroner in tracing to their causes deaths from violence and accident, and for expert legal ability in dealing with cases of homicide, suicide and murder. He recommended that the coroner's jury as now constituted be abolished, as has already been done in Massachusetts; and that efforts be made to secure as coroners men of expert medical and legal ability. He stated that the system now in force in Massachusetts was considered far superior to the old system.

Dr. Lyster spoke of some of the evils of the present system, and the importance and need of the proposed reform.

Dr. Baker read a report of public health subjects in the proceedings of the Michigan State Medical Society, at its meeting in Lansing in May last, which was ordered published in the annual report.

The secretary reported further correspondence relative to the sanitary convention proposed to be held at Coldwater in February, 1879; also, correspondence with makers of sanitary appliances, relative to exhibiting their inventions at these conventions. He exhibited Wheeler's disinfecter (invented by W. F. Wheeler, 119 S. Fourth st., Phila., Pa.) for rendering the water supplied to urinals, water-closets, etc., itself a disinfectant, by means of car-

bolic soap; also, Houghton's reversible charcoal water-filter, designed to be attached to water-pipes at the point of delivery, which had been obtained for the same purpose from the agent, E. C. Houghton, 75 Devonshire street, Boston. The secretary presented the usual report of work in the office during the last quarter. Circulars have been sent to the clerks of cities and villages who have not made the return of health officers as required by law; copies of the vital statistics of Michigan and of the last report of the State Board of Health have been distributed to sanitarians, sanitary exchanges of the board, and others engaged in sanitary work in the State; 20,000 copies of the document on restriction and prevention of diphtheria have been printed and are being distributed; replies of correspondents relative to diseases of 1877 have been compiled for the annual report; other manuscripts have been prepared for the report of the board for 1878, and the president's address and a few other articles have been printed. The annual inventory of property purchased, issued, used, and on hand, has been made. The meteorological registers supplied by the observers of the board for the year 1877 have been compiled as a basis for an article on the "Principal Meteorological Conditions of the Year." The report concerning the property of the board showed an addition to the library by gift, exchange or purchase, of 258 volumes, mostly bound.

A motion was passed directing a complete set of meteorological observations to be taken in the office of the secretary.

A motion was also passed directing that the document upon the restriction and prevention of diphtheria, recently issued by the board, be electrotyped for use by local boards of health and others interested in the restriction of the disease.

Dr. Lyster presented a communication from a dentist of Detroit, relative to the preservation and care of the teeth, which was read and discussed.

The secretary presented a communication from Dr. O. Marshall, of North Lansing, relative to opium-eating and the opium habit, which included a summary of replies by 96 prominent physicians in Michigan to a circular of inquiry as to the number of opium and morphine-eaters of both sexes in their

localities. There were reported from these places, mostly villages and smaller cities, 1,313 habitual eaters of the drug. It also included a statement from the United States treasury department, showing that there have been imported during the 27 years from 1850 to 1877, 5,299,774 lbs. of opium, valued at \$26,142,085, besides 22,565 oz. of morphine, valued at \$73,433, imported during the 17 years from 1861 to 1877; also, showing that the imports for the ten years ending with 1877 exceed by 2,057,080 lbs., or nearly 200 per cent., the imports for the ten years ending with 1859. In addition, it is believed that there has been at least 10 per cent. of the amount above stated smuggled into the country. The estimates for Michigan based on these replies and the statements of a wholesale drug-house in Detroit show the consumption of opium to be very large.

The secretary read a communication from Dr. Topping, of Dewitt, based on recent experiences in an epidemic of diphtheria, in which he reversed a former report that he had seen no evidences of the contagiousness of the disease, having lately traced about 70 cases to one first case. Also, two communications from Dr. J. S. Caulkins, of Thornville, relative to the period of incubation in diphtheria, based on a study of nine cases in one family, six of which were fatal, and eight cases in another family, four of which were fatal.

A resolution was adopted, directing the committee on legislation to prepare a memorial to the legislature in favor of a topographical survey of the whole State for sanitary purposes, to be instituted at once and carried forward to its earliest completion.

Dr. Baker was appointed a committee to confer with the representatives of the American Public Health Association, American Social Science Association, and others, relative to devising some method for uniform registration of births, marriages and deaths, throughout the United States.

After the auditing of bills, and a large amount of routine business, the board adjourned to meet Jan. 7, 1879.

Foreign Correspondence.

CLINICAL NOTES FROM PRAGUE AND BERLIN.

It is strange that the farther one gets from the source of the Lister method of antiseptic surgery, the more firmly the profession believe in its efficacy. Mr. Spence, Mr. Lister's former colleague in Edinburgh, is one of the bitterest opponents of the system that I have ever heard upon the subject. In the performance of an amputation at the hip joint, I was surprised to see him using the spray, after what I had heard him say in opposition to, and almost in ridicule of the whole system.

His explanation was that he did so in deference to a public sentiment in its favor, as the operation was one of the most dangerous known to surgery.

The patient recovered and the advocates of the carbolized spray asserted that it was the only case of the kind that Mr. Spence had operated upon successfully for many years. In London, fifteen months ago, most of the surgeons did not use the spray in their operations. In Vienna it is generally used, though often very imperfectly. In Prague the system is carried out in all its details. They even sent an assistant to London, the past winter, to learn from Mr. Lister himself all the minutiae of the process.

While in Prague, I spent most of my time in the surgical and gynaecological wards.

CÆSAREAN SECTION.

Prof. Breisky, of this city, has lately done this operation by the new method of removing the entire uterus, after the manner which I described in a former letter as done by Carl Braun, of Vienna. Prof. Breisky tells me that this is the seventeenth

Cæsarean section that has been done here in Prague during the last 35 years, and that this is the only patient who has recovered. The operation was done strictly antiseptically.

I saw the stump dressed frequently, and the most scrupulous care was used to prevent its being exposed for a moment to the air without the application of the spray.

Prof. Breisky remarked that the procedure was rather expensive for a pauper patient, as the dressings had cost \$20 for the first two weeks.

I asked the doctor what he thought of Prof. Thoma's new method of doing this operation. His reply was that with the favorable results obtained by this mode of operating, he thought that any other plan was absolutely criminal.

EMMET'S OPERATION,

as it is called here, of paring the edges of the cervix uteri where it has been torn during labor, and bringing the parts together by means of silver wire sutures, Prof. Breisky has done thirty-two times during the last eighteen months. He tells me that the benefits that are supposed to be derived from the operation by its advocates are, in his opinion, greatly over-estimated. He finds, from an extensive observation of cases, that many women who have laceration of the muscular fibers of the cervix uteri have none of the morbid symptoms which this operation is supposed to remedy: and that, furthermore, few of the cases upon which he operated were benefited further than could be accounted for by their necessary confinement in bed, and the inflammatory reaction that must follow after so considerable an operation.

PARAMETRITIS.

In the treatment of this affection, Prof. Breisky's idea is to begin early, and vigorously combat the tendency to the formation of pus. To fulfill this indication, he uses the tincture of iodine, applying it not only to the pelvic walls outside, but, putting the vaginal walls well upon the stretch with a bivalvular speculum, he applies the remedy high up on the vaginal mucous surface, as strong as can be borne by the patient. He makes the applications twice in the twenty-four hours.

ERYSIPELAS.

In the surgical wards in Prague, a paste composed of equal parts of tar and alcohol is the only remedy used locally in the treatment of this disease. It is spread upon a cloth large enough to cover the surface affected, and to extend a short distance on to the healthy skin. The applications are only changed when they become dry, as it is considered desirable not to expose the parts to the air any oftener than is absolutely necessary. They give at the same time internally one gram of quinia in the twenty-four hours, divided into four doses.

The tincture of the chloride of iron, which is so generally given for this disease in America, and which Prof. Gross taught me, fifteen years ago, was an absolute specific if given in sufficiently heroic doses, I have not found used at all in the wards of any of the hospitals that I have visited in Europe.

Dr. Goldthammer, of the Bethanien hospital at Berlin, applies locally a three per cent. carbolized olive oil. He covers the parts thickly with this mixture, and then envelops them with a heavy layer of sheet wadding, and does not change the dressing oftener than once in the twenty-four hours. He gives nothing internally but wine and a generous diet, being careful at the same time that the patient has plenty of fresh air.

In Prof. Frerich's wards in the Charité, in Berlin, I saw a number of cases of erysipelas and observed closely his manner of treating them. Among them, was a robust girl aged 22 years, who had the disease in a very severe form. Prof. Frerich made her case the subject of a clinical lecture.

"This," he said, "gentlemen, is a case of diffused erysipelas, and is one of the most troublesome and unsatisfactory diseases that we have to treat. She has now been in the hospital eight days. The eruption, which began on her face, has gradually run down until it has now reached the middle of her thighs, and when it has run out at the ends of her toes, it may light up again where it first began, and traverse the whole body a second and even a third time.

"During two days of this time her temperature fell to the normal standard, but this morning it is 40.20. It is one of the dis-

eases in which the temperature curves are governed by no known laws. To-morrow it may be normal, or it may even exceed that which we have to-day.

"It would consume an entire hour, if I should attempt to give you even a catalogue of the different remedies, local and constitutional, that have been brought forward and highly extolled in the treatment of this disease, during the forty years of my professional life; but as they have each proved absolutely worthless in my hands, I will not burden you with their enumeration, further than to remark that all *irritating substances*, such as the tincture of iodine, the nitrate of silver, and the like, applied with a view to limiting the spread of the disease, are worse than *useless*, they are absolutely *hurtful*, for while they entirely fail to fulfill the indication for which they are applied, they add to an already existing inflammatory condition of the skin.

"The last plan of treatment that has been brought to our notice was claimed to be founded on something more than simple empiricism. The disease, as was asserted, being produced by the impregnation of the cuticle with certain bacteria, we had only to resort to that great destroyer of the lower forms of animal life, carbolic acid, to effectually arrest its progress.

"We were told that the hypodermic injection of this remedy upon the borders of and just beyond the confines of the eruption would completely head off the disease in its onward march. In my wards here in the Charité we have tried this plan of treatment most effectually, and I can assure you that we have not only found it of no use, but absolutely, and often to a high degree, *injurious*. It has no effect at all in arresting the spread of the disease; besides, we have had cases where abscesses have followed its use that were troublesome to manage, and highly prejudicial to our patients.

"If we are to discard all these new and old plans of treatment, then what are we to do? Unburden your minds of all specific remedies, and treat your case symptomatically entirely. If this patient cannot sleep, we will give her opium or chloral, whichever seems best fitted to fulfill the indication in her particular case. When her temperature is down, and she appears exhausted

from the previously existing hyper-pyrexia, we will give her wine, camphor and the like.

"As her temperature is very high at present, we shall prescribe for her to-day 1 gram of quinia to be divided into three doses, one to be given every eight hours. Besides this we are using cold baths of a temperature of from 18° to 24° , repeated from two to six times a day, according to the temperature that we have to combat.

"We are keeping the parts that are the seat of the most active stage of the disease constantly enveloped in cold compresses, from water of a temperature of from 10° to 16° , and this is all we are doing, or shall do."

I watched this patient every day, after the above lecture was given, while she remained in the ward. The disease did not entirely disappear until the fifteenth day after she entered the hospital. On the 10th day her temperature was normal for twelve hours, and on the 12th day she had no fever for the same length of time, but after each intermission she had an exacerbation in which her temperature rose to above 40° .

VOLVULUS.

Mrs. E., a married woman, aged 43 years, suffering from complete obstruction of the bowels, was brought into the lecture-room and her case made the subject of some clinical remarks by Prof. Frerichs. She had had no evacuation from her bowels for twelve days, was bathed in a cold perspiration, her countenance expressed extreme suffering, her whole aspect seeming to portend a speedy dissolution. She vomited everything she took into her stomach, and the matters ejected were frequently mixed with stercoraceous ingredients. Prof. Frerichs said:

"Gentlemen, the first question that presents itself in connection with this case, is the location of the obstruction; and the second point for consideration is its character. As we look at her abdomen and observe the irregular peristaltic contractions that take place, we see that they are mainly confined to the central portion of the bowels, near and around the umbilicus.

"As we follow around the course of the colon, we find this portion of the intestinal track undistended and comparatively

free from any unnatural movement. This leads us to infer that the obstruction is in the small intestines, probably in the jejunum. Now as to its nature. Upon this point we shall have to speak with some reserve.

"What do her symptoms lead us to infer? We have not been able to find any circumscribed hard mass or tumor, even by the most careful external exploration. We therefore exclude both hardened feces and gall stones as the cause of obstruction in this case. Our next most frequent cause of an acute attack like this, is either intussusception or a twisting of the gut upon itself. We believe the cause of the difficulty in this case, to be due to one of the last two conditions, but to which of these conditions we are unable to say.

"Of course we would not think of giving a patient like this a cathartic. If we were *certain* that we had intussusception, we would give an opiate, to quiet all peristaltic contractions of the intestines; but as this remedy would be contraindicated if we have simply a twisting of the gut upon itself, we shall discard this remedy also.

"We shall use for this patient ice and ice water, and these alone. By means of a Hegar irrigator we shall throw as much ice water into the bowels, per rectum, as we can possibly do without fear of their over distention. We have used in this case two litres of water at each irrigation, and have repeated this every 4 to 6 hours. We give her by the mouth all the ice that she can eat, and nothing else."

From the general aspect of this patient I had scarcely a doubt but that she would soon die, and so I watched the autopsies at Prof. Virchow's pathological rooms for two days, expecting to be able to see the diagnosis in her case cleared up by a post-mortem, but as she did not make her appearance, I went in search of her, to the ward in which was her bed, on the third day, and found to my surprise that she was sitting up in bed, eating a plate of soup, and was convalescing nicely.

FRACTURES OF THE FEMUR.

After observing the animated discussions that have lately occurred on the other side of the Atlantic, between Prof. Sayre on

the one hand and Prof. Frank Hamilton on the other, as to the possibility of obtaining perfect results in the treatment of fractures of the femur, I have been lead to carefully watch the management of this accident in the hospitals in Europe, not only as to the mechanical appliances used, but also as to the results said to be obtained. Although the limits of this article will not allow me to go extensively into a review of this very important question, yet I will give the followig brief summary of what I have observed.

The first point that strikes me as a deviation from what is so stringently taught by most of our surgeons, is that there are *generally* no active measures used to produce extension and counter-extension in the management of these cases. Buck's extension apparatus (or the American method, as it is called here) is used very infrequently indeed. The surgeons in St. George's Hospital in London are the only ones whom I have found who use it *generally*, and they only do so when the fracture is very oblique and the shortening very considerable. When I have asked surgeons why they did not adopt this simple means in the treatment of this accident, they have generally found fault with it on two accounts; first, its inconvenience to the patient by producing pain, etc., and the liability of non-union following its use if the weight used was very heavy. The appliances that are used in the treatment of this accident are almost as numerous as the men who treat it; yet they very generally fail in the one thing that is considered needful with us, and that is, in producing any considerable extension and counter-extension.

At the Bethanien Hospital, in Berlin, I saw a number of cases of this kind being treated, and I got some items that would delight Prof. Hamilton, and furnish him with some valuable paragraphs for the next edition of his work on fractures and dislocations.

Prof. Wilms says that he tried effectually the application of the plaster of Paris dressing with a view of keeping up counter-extension in the perineum; and that whenever he effected this object, it was at the expense of great suffering and inconvenience to his patients, and that in several instances it produced exten-

sive sloughing in this region. He, however, uses the plaster of Paris dressing, not extending it *internally* sufficiently high to press upon the perineum, but carrying it up on the outward aspect of the limb as high as the crest of the ilium, extending the bandage around the entire pelvis, but not applying the *plaster* except to the outward aspect of the dressing. He further says that extension and counter-extension are *generally* not necessary in the treatment of these fractures; that the main point is to *adjust* your fracture *well*, and then keep the parts quiet. To effect this object, he anæsthetises his patients with chloroform before he attempts to adjust the parts. This, he claims, takes off all muscular spasm, and enables him to do his work well. He applies his bandage under the influence of the anæsthetic, an assistant keeping up extension until the bandage dries sufficiently to be firmly set. To facilitate the rapid drying of the dressing, he mixes his plaster of Paris in hot water.

Prof. Wilms says that his results are good, and when I asked him how good, he said that the shortening was generally under one inch.

In the cases I saw treated in Prof. Langenbeck's clinic, the plaster dressing was only applied as high as the hip joint, the perineum not being pressed upon. A long, external, wooden, straight splint extended from above the pelvis the whole length of the limb, to which was attached a foot piece to keep the foot from rotating, and was used in addition to the plaster bandage.

I shall speak in a future article of the ingenious manner in which the plaster of Paris dressings are used in the hospitals in Paris.

W. S. CALDWELL.

PARIS, October 29, 1878.

HIGH TEMPERATURE—Mr. Searle, of Scarborough, recently brought before the Clinical Society of London a case in which the temperature reached 50° C. (122° F.), and yet the patient recovered.

Editorial.

VALEDICTORY OF THE YEAR.

The third year of publication of this journal, since the organization of the Medical Press Association, is completed with the issue of this number. It has been, in every respect, the most successful and satisfactory of all the years that have passed since the issue of the first number in 1844.

This journal, when it ceased to be the organ of any medical school or set of medical men, entered upon a career of usefulness which could hardly have been anticipated. The only rivalry between physicians and between medical colleges which these pages have evinced under the present management, has been an honorable rivalry between contributors respecting the worth and value of their communications. Here have appeared, side by side, the papers of authors which, but a few years ago, would have seen the light only in medical periodicals of limited circulation and discordant interests. This happy and wholesome association has served to divorce medical politics from medical literature in Chicago, and has contributed to a cordial understanding between professional gentlemen of this city, which, by the liberal minded among them, is highly appreciated.

But the influence of this journal has been more widely felt. From the position of a provincial publication, it has advanced to become one of the national exponents of medicine in America. Its foreign exchanges, reaching hither from every quarter of the globe, reproduce, with each month, an increasingly large number of original papers which were here first published. Its editorial articles have been copied and quoted in all parts of the Union. Its foreign correspondence has been re-published, on many occa

sions, with favorable comments, on this side of the Atlantic. Unsolicited endorsements of its high character and standing have appeared in the medical publications of Great Britain, France and Germany.

With this enlargement in its aim and scope, the list of its subscribers has not only increased, but extended so as to include the residents in the most distant parts of the country. An edition is now distributed from California to Maine, and from Canada to Louisiana. As might naturally be expected from such a circulation, our list of contributors is no longer limited to the body of practitioners who have settled in the Northwest. The physicians of Massachusetts, New York and Maryland, as well as those of Wisconsin, Iowa, Minnesota, Indiana and Illinois, have aided in spreading before our readers the results of scientific thought and labor. In consequence of all this, we have to announce that during the year now completed, the publishers have been enabled to expend a large sum upon the management of the journal, which represents the surplus of its receipts over and above the amount of its necessary expense.

For these results the editors are well aware that they are indebted, less to their efforts than to the excellence of the contributions of correspondents, authors and collaborateurs. To all such they extend their congratulations and thanks, in the hope that during the year to come they may look to the same and other sources for even better results. For themselves, they engage that no efforts shall be spared to still further enlarge the scope and usefulness of the CHICAGO MEDICAL JOURNAL AND EXAMINER.

No more important change has been made in the conduct of this journal during the past year, than the adoption of the metric system in its pages. In this important movement, we took a step in advance of all the other medical publications in this country. It is a step for which we have received much credit and many congratulations—a step which we have never had occasion to regret. Without urging any physician to make abrupt changes in his mode of prescribing, we thought that a wise and useful measure, which would gradually make our readers and correspondents familiar with the system, at least in its written forms. It cannot be doubted that metric measures, already

extensively employed among scientists of all nations, legalized by act of congress, and urgently recommended to the profession of this country by its national association, will eventually be used, at least by physicians and druggists, to the exclusion of all other standards. In anticipation of this desirable end, the JOURNAL AND EXAMINER is content if its pages shall contribute to the result by their monthly exposition of the nomenclature, meaning and value of the terms of the metric system of weights and measures.

For the CHICAGO MEDICAL JOURNAL AND EXAMINER, the retrospect of the past year is therefore a review of its successes ; its future is assuredly full of promise. In that future it shall not fail to contribute its share to the work of elevating the standards of medical education, diffusing a knowledge of the results of scientific research the world over, and supporting all measures which look to the advancement of the best interests of the medical profession.

TO OUR SUBSCRIBERS.

As the present subscription of many of our readers will terminate with this number, we wish to call their attention to the fact that in order to make the journal most effective for benefiting the profession, it is absolutely necessary to keep it on a sound financial basis, and the experience of medical journals the world over shows that it is impossible to do this without making subscriptions payable in advance. We, therefore, urge our patrons to send in their renewals before our next mailing day, in order to insure the uninterrupted receipt of their journals. We always receipt promptly ; therefore, if any one does not hear from his remittance within ten days, he may fairly suppose it has gone astray, and he should write us immediately, giving date of remittance, etc.

We have made arrangements which, we think, will be for the advantage of those of our subscribers who wish their journals bound, or who may desire to purchase medical books. For particulars, please read our notice among the advertising sheets.

Reviews and Book Notices.

THE LAW OF POPULATION—ITS CONSEQUENCES AND ITS BEARING UPON HUMAN CONDUCT AND MORALS. By Annie Besant. Authorized American from the 25th thousand, English Edition.

This is one of the issues of what may be most fittingly termed the *pseudo-philanthropical press*. Commencing with a statement of the Malthusian doctrines concerning the disproportionate ratios of increase of the earth's population and the production of food, it is made clearly apparent that in certain countries the population is becoming too great for the supply of food. This approach to starvation of the masses continually grows worse instead of better. Consequently it is desirable in densely crowded communities to do something to limit the propagation of the species, if we would obviate the tendency to increasing misery.

The author then reviews the evils which grow out of an attempt to limit population by postponement of wedlock till a late period of life. This course leads inevitably to prostitution of great numbers of women, and spreads disease and immorality in every direction. This method, therefore, is pronounced a failure.

So far there is no fault to be found with the essay. It reads like the work of a true philanthropist. But now comes the descent from the sublime to the ridiculous. Artificial interference with the results of copulation is announced as the true way of getting around all these frightful difficulties which render the human race a burden to itself. A soft sponge in the vagina of every wedded wife—and no woman hereafter need go unwedded through fear of offspring—is the unfailing panacea which shall keep the balance true between mouths and food! No other method is considered by our author equal to this!! I am not

sure but it is a sufficient criticism to say that for the publication of this opinion the authoress was sentenced by a court of law, in that very land which she desired to relieve, to pay a heavy fine and to suffer a limited term of imprisonment. Evidently the morality of such philanthropy is not very highly esteemed.

It is not, however, with the morality of these expedients that we have to do. What shall we say of them when viewed from the stand-point of the physician? Upon this subject, the testimony of gynæcologists is uniform, to the effect that such methods infallibly lead to uterine disease. This should be sufficient to condemn the practice. If we are to resort to art for relief in these matters, let us be consistent and thorough. Let us have some more sanitary laws and some more sanitary officials, to regulate our lives. It is an open question whether the practice of spaying would not be preferable to such nuisances as the advice of this pamphlet would create. When our sexual relations have been thus perfected and re-adjusted to the wants of *civilization*, we shall have a lesson in the results of pin-hole philanthropy at which angels—if not men—will stand aghast.

Man is a fine animal as he stands; but if he is to be improved in any respect we must be content to work with instead of against Nature. I cannot but think that it would be well for these agitators, who so greatly desire to improve upon the relations which exist between the sexes, to imbibe a little of the wholesome spirit displayed by Miss Polly Baker, when she was arraigned before the judges, in the good old times, to answer for the birth of a fifth illegitimate child. She addressed the court (so runs the ancient chronicle) to the following effect:

"She acknowledges the fact; says that twice she paid the fines imposed, and twice was punished for lack of means with which to pay the fines; thinks all this may be in accordance with the law, but argues on the unreasonableness of the law which punishes her, who at the risk of her life, has brought five children into the world, maintained them well by her own industry without burdening the township, and fitted them to become good subjects of the king; that she has wronged no one, unless it be the minister or justice, by reason of their having missed a marriage fee; that she would have much preferred to be married, never

having refused an offer of marriage, but on the contrary, accepting the first one she had, and the result was she unhappily lost her own honor while trusting too much to *his*; that she had been most severely punished, while he had been raised to an office of honor and profit, being, in fact, one of the judges in that very court in which she was being tried, but not upon that occasion present. She reminds the court that, according to their belief, she has offended heaven and must suffer eternal fire, and urges if that is not sufficient punishment without their intervention; at the same time declares her unbelief in such doctrines as that Heaven is angry at her having children, when to the little she had done toward it God had been pleased to add his divine skill and admirable workmanship in the formation of their bodies, and crowned it by furnishing them with rational and immortal souls. She further urges that if men must be eternally making laws, they ought at least to leave alone the natural and useful actions of men, and not by their prohibitions to turn such actions into crimes. They ought to punish the bachelors, who do nothing to populate the country, but leave unproduced (which is little better than murder) hundreds of their own posterity, while young women are most severely punished for obeying the first great command of nature and of nature's God, to increase and multiply—a duty from the steady performance of which nothing has been able to deter her; and that the court, instead of punishing her, ought to erect a statue to her memory."

It is also recorded that one of the judges married her the next day, and she had fifteen more children.

Verily, if we must choose between Miss Baker on the one hand and Mrs. Besant with her sponges on the other, give us Miss Baker every time, and the bread and butter question will surely take care of itself.

H. M. L.

INSANITY IN ANCIENT AND MODERN LIFE, WITH CHAPTERS ON ITS PREVENTION. By Daniel Hoek Tuke, F. R. C. P., Lond. London: MacMillan & Co. Chicago: Jansen, McClurg & Co., 1878; cloth pp. 226, \$1.75.

Dr. Tuke, the author of the present volume, is already favorably known to the profession by his admirable treatise entitled,

"Illustrations of the Influence of the Mind upon the Body," and by his joint authorship with Dr. Bucknill of the best work on Psychological Medicine in the English language. The present, like the former publication, shows earnest, patient and laborious research and a capacity to draw judicious conclusions from materials collected.

The book is divided into three parts.

Part first considers the prevalence of the causes of insanity among the nations of Antiquity. He begins with a discussion of the causes that prevail generally in the production of insanity, enumerating: first, intoxication, including the abuse of stimulants of all kinds, their effect on the individual and on his offspring; second, defective nutrition—including bad sanitary arrangements—which leads to malnutrition and exhaustion of the nervous centers and degeneration of race; third, various causes, chiefly moral, which excite or depress the emotions profoundly, and lastly intellectual strain.

These various ætiological factors are considered in connection with the mental aspects of the prehistoric man; of the ancient Jews and Egyptians—and of the Greeks and Romans. In this discussion our author has expended a vast amount of time in historical research, and his deductions are well worth the careful attention of the profession, as they are of great practical importance to the laity.

In the conclusion of this part of his subject he says: "After the necessarily imperfect sketch we have drawn of the psychological bearings of ancient history, as to the prevalence of the main causes of insanity, we endeavor to draw a general conclusion, we appear to be warranted in saying that mental disease was not likely to be largely developed among the primitive races, that the causes of mental disorder must have exerted a very considerable influence upon the four important nations referred to, less in their earlier, much greater in their later and highly organized condition."

"In favor of the nations of antiquity as compared, with England, may be enumerated less dram and beer drinking and fewer half-starved and diseased children reared."

"And, again, the very benevolence and consideration which a

humane nation like England displays towards the poor, and those of feeble mind, or who are becoming insane, instead of allowing them to perish, favors alike the accumulation of insane persons, and the propagation of the disease by such, before they are placed in restraint or after their recovery. Feeble mental constitutions perished by the way in Egypt; sons, probably affected with moral insanity, as evinced by disobedience to parents, etc., were stoned to death in Palestine; homicidal men killed and were killed in the wars of Greece and Rome, and defective children were thrown down the Tarpeian rock. There was not, therefore, so much feebleness, moral insanity, or homicidal impulse transmitted to the next generation in the old heathen or Jewish, as compared with modern Christian populations."

The second part of the book is devoted to the consideration of the subject in its relations to modern life, with chapters on: 1st, insanity, chiefly in relation to the working classes; 2d, insanity in relation to the higher classes, and 3d, facts and figures in regard to the increase of insanity. In these chapters will be found an interesting psychological comparison between modern and ancient life and a satisfactory explanation of the greater prevalence of insanity at the present time than formerly.

The third part is a discussion of the important question of prevention. In this he enunciates as a cardinal principle that the brain is the organ of the mind and subject to the laws of physical life in general, and to those of cerebral life in particular—that proper nourishment, assimilation and discharge of effete matter are as necessary for the mind organ as for any of the other viscera of the human body.

Chapter IX. is entitled "Warnings of Danger," and is given to the consideration of certain symptoms of brain lesion that our author regards as of special prominence in the onset of insanity such as insomnia, cephalalgia, mental inaptitude, listlessness, various emotional disturbances and indecision of purpose. He also, in the same chapter, draws an excellent picture of the insane temperament.

In chapters X. and XI. are considered the importance of cheerfulness, mental rest and proper diet in arresting the facile descent to madness.

These chapters are admirably written, full of valuable facts and well worth the careful study of every physician.

The book closes with several pages of tersely written psychological axioms, rich in wholesome counsel, for those unfortunate enough to possess the insane neuroses.

D. R. B.

NERVOUS DISEASES: THEIR DESCRIPTION AND TREATMENT.

By Allan McLane Hamilton, M. D., one of the attending physicians at the Epileptic and Paralytic Hospital, Fel. N. Y. Acad. Med., etc., etc., 8vo., pp. 512, with 53 Illustrations. Philadelphia: H. C. Lea, 1878.

After having read the various and widely differing reviews which have appeared, we took up Dr. Hamilton's book in a very uncertain mental condition, but with every intention to ascertain the real character of the volume in hand.

A very careful examination has fully demonstrated that the many favorable notices which have appeared in the various journals have been in consonance with the merits of the book, and, further that the four evidently *personal* and self-condemnatory reviews, which stand arrayed against the honest and truthful voice, have emanated from some unworthy rival, from one and the same person. Such scurrilous attacks are not only grossly unfair, but are a reflection upon the profession. Although eventually suicidal, such practices succeed for a while in influencing the unwary.

The author's self-imposed task was no simple one; he has stated in his "preface" that his object has been to produce a concise and practical work, whereby the diseases of the nervous system may be, if possible, more comprehensible to his readers than they have been by former elucidations, and we do not hesitate to affirm that he has produced the best text-book, considered in all its relations, written in the English language. Hammond's excellent work is more bulky without conveying any more information; then, too, it contains some views which have not been accepted by other neurologists, or in any wise satisfactorily demonstrated. Like lectures in general, Charcot's and Wilke's works are very instructive and interesting reading for the general and special practitioner, but are too verbose and too limited in sub-

jects for the use of students. Dr. Hamilton's book is especially adapted for the use of students; it is essentially a text-book. Its arrangement is excellent. Beginning with the cerebrum and its membranes, it follows a course therefrom to the cerebellum, spinal cord, medulla oblongata, cerebro-spinal nerves, and, finally, to the peripheral nerves. The book first introduces us to what and how to observe and record in patients, gives directions for making post-mortem examinations in nervous cases, and very satisfactorily explains the use of the various instruments needed for a proper diagnosis, namely, the thermometer, æsthesiometer, plesimeter, dynamometer, ophthalmoscope, electrical apparatus, rubber muscles, etc. Wood cuts illustrate the text. The diseases of the cerebral meninges are excellently described and diagnosed, reports of clinical cases materially adding to the elucidation of each subject. The diagnosis of ante-tubercular meningitis (acute hydrocephalus) is a model of excellence. A clearly described article on cerebral hyperæmia brings us to the best chapter in the book, cerebral hæmorrhage. Twenty-nine pages are devoted to this subject, which is treated in a masterly manner. No one can read this article without gaining a better understanding of this affection. We notice an error on page 95, wherein the author's calculation has been a little at fault. We presume Dr. H. refers to the *twenty* cases, with no history as to cause, when speaking of those wherein the attack came on during the *night*, instead of *thirty*, as is stated in the text.

Of cerebral anæmia, embolism, and thrombosis, the student shall find a concise and clear exposition. Stomachic and auditory vertigo are not omitted. Every student who has studied cerebral softening in other works must hail with delight the author's most lucid and full elucidation of this interesting though difficult subject. This chapter alone is worth the price of the book. Aphasia is well described; excellent wood-cuts illustrate certain brain localizations. The chapter on "Brain Tumors," ranks next to that on cerebral hæmorrhage in point of excellence. It is a very complete chapter; and, with the assistance of Petrina's (of Prague) directions for their localization, the practitioner may diagnose these tumors with some degree of certainty. The wood-cuts accompanying the text are very good.

Spinal affections are fully exposed in the light of our latest knowledge. We have only time and space to call attention to the fact that "tetanus" is an able article, its value being greatly enhanced by the figured map of the Long Island district. Dr. H. has embodied his personal inquiries upon this district in the volume. The other exhaustive and eminently practical article in this book is upon epilepsy; a better one could scarcely be written. Every practitioner who thinks the routine use of the bromides is the best and proper treatment of this affection should certainly purchase the author's work, read and digest his remarks upon the treatment of this obscure disease. Bulbar paralysis, cerebro-spinal meningitis, alcoholism, hydrophobia, hysteria and its varieties, chorea, paralysis agitans, and Graves' disease, are all well described. Neuralgia and other diseases of the peripheral nerves are equally well treated of. An important feature for students is an appendix of 95 excellent formulæ. A full index closes this interesting and valuable production.

We have noticed some typographical errors, unavoidable in a first edition. Take the book all in all, considering the author's concise and lucid style, his rare ability in compressing a large amount of information into small space, and the fact that he has elucidated his subject in the light of the latest researches, we assure the student and general practitioner that no better book of its kind exists than "Hamilton on Nervous Diseases."

F. D. B.

A GUIDE TO THE PRACTICAL EXAMINATION OF URINE. For the use of Physicians and Students. By James Tyson, M. D. Cloth, pp. 172. Second edition, 1878.

Little need be said to introduce this second edition of Dr. Tyson's work. Special credit is due the author for the minute attention which he has paid to the examination for albumen. We regret, however, that the author has not incorporated the very simple methods of estimating the quantity of albumen approximately by a dilution of the urine. The suggestion, we think, was made by Dr. Roberts, of Manchester.

There is another omission which we also note, namely, the estimation of urea by the diminished specific gravity, after

subjecting the urine to the action of the hypochlorite solution. This method is due to Dr. G. B. Fowler.

We should like also to have seen some mention made of the probable relation of the presence of carbonate of ammonia in the blood, to the phenomena usually referred to uremia.

Although we refer to what we consider omissions, the reader will be amply repaid by the accuracy of detail which the author displays on those subjects that he has developed.

R. T.

TRANSACTIONS OF STATE MEDICAL SOCIETIES.

1. *Transactions of the Medical and Chirurgical Faculty of the State of Maryland. Eightieth annual session, held at Baltimore, April, 1878.*

2. *Transactions of the Iowa State Medical Society, 1877-78. Volume III., pp. 196.*

3. *Transactions of the Twenty-fifth annual meeting of the Medical Society of the State of North Carolina, held at Goldsborough, May 18th, 1878, pp. 103.*

4. *Transactions of the Medical Association of the State of Alabama. Thirty-first session, 1878, pp. 311.*

1. The *Faculty of Maryland* knows well to honor its dead. It paid a fitting tribute to the memory of its distinguished member, Professor Nathan R. Smith (who died July 3, 1877), in the address and biographical sketch by S. C. CHEW, M. D., and by adorning the transactions with the picture of the departed friend.

Professor ALAN P. SMITH, reports fifty-two successive cases of lithotomy without a single death. "Of these, 16 were below five years of age, 13 between five and ten years, 11 between ten and twenty years, 5 between twenty and forty years, and 7 between forty and seventy-five, 4 more below two years of age, the youngest being twenty-two months. The oldest was seventy-one years. Of the whole number, only two were negroes; these, curiously, were the youngest, of twenty-two months, and the oldest, seventy-one years." With the exception of six cases, the operation was performed with the lithotome of his father, the late N. R. Smith; and to the use of this instrument, he attributed in a great measure the satisfactory result of the operations.

The calculi removed varied in composition and size; the largest one measured 13 ctm. in circumference, and weighed 6 decagrams. In a few cases after hæmorrhage occurred, in two instances partial non-retention of urine was the result, and in one case there remained a small fistulous opening in the perineum.

The most interesting case of the whole series was a middle-aged man with a double penis. "The organs were separated above by a deep sulcus, below which they were closely united. They were slightly under the average normal size, and were unprovided with any prepuce. The one upon the right of the median line was normal in every respect, being traversed by an urethra beginning at the extremity of the glans, while the one on the left had the urethral opening below, and just in advance of the scrotum. From this point forward to the glans, the organ was perfectly solid. * * * The scrotum was natural in every respect, and contained two testes of normal size. Upon making an examination, I, of course, passed the sound into the urethra of the right hand penis. The instrument slipped readily into the bladder, but I could not detect by its aid the slightest symptom of calculus. Very much surprised at this, I asked the patient through which opening he passed his urine, and was informed that he used both; and, what was more curious still, that he could use either at will, or that he could first pass a quantity of urine through one, and immediately after discharge about the same amount through the other. Then, for the first time, it occurred to me that there were two bladders; and calling for two utensils, I desired him to first discharge from the right hand organ. From this there flowed a quantity of clear, amber-colored, healthy urine; while, when directly afterwards the same act was performed by the one on the left in a separate vessel, the fluid was ammoniacal and turbid with mucus and pus. Then, at once the case was clear; he had two bladders. The one which I had not yet examined contained the stone sought for. I then attempted to pass my sound into the second urethra, but found the canal contracted and tortuous. Substituting a bougie tipped with steel, I was rewarded by striking immediately a large calculus. Several days were spent in dilating and straightening

the canal by means of sea-tangle tents. The removal of the stone was readily effected, the incision being made from within, outward with a bistourie caché. Violent hemorrhage ensued after the operation, and continued very profuse in spite of the most strenuous efforts to arrest it, till he became almost perfectly exsanguine. The pulse ceased to beat at the wrist * * and only slight heart sounds could be detected. However, * * the hæmorrhage ceased; he commenced slowly to react, and progressed to perfect recovery."

Dr. THOMAS R. BROWN follows with a consideration of the various modes of treating urethral strictures.

Dr. JOHN S. LYNCH briefly treats of all agents which reduce animal heat, under the names of *apyretics* and *antipyretics*.

Dr. P. C. WILLIAMS discusses the much mooted question of *chloroform in obstetrics*. He considers chloroform as safe as any other anæsthetic in obstetrical practice, and advocates its use: 1, "whenever during labor the woman becomes nervous, fretful, and apprehensive;" 2, "when the os uteri remains firm and unyielding, and threatens to produce a long, tedious labor;" 3, when the termination of the labor is delayed by rigidity of the perineum; and, 4, in all obstetrical operations.

Dr. I. E. ATKINSON, in his report on materia medica, makes some very sensible remarks in favor of the metric system.

2. Of the many short articles which compose the volume of the *Iowa State Society*, none has interested us so much as the paper on "Headache," by Dr. E. H. HAZEN. May be because headache with its hundred-fold variations is a dear old friend of ours. Dr. H. confines his remarks to headache in diseases of the eye and ear, and shows how it is often erroneously regarded as a neuralgia, which has aggravated an existing eye trouble, such as granular conjunctivitis, where it is a symptom indicating the outbreak of inflammation of the cornea; or headache is treated as neuralgia, while the causative disease is entirely overlooked. As instances of this kind, glaucoma, neuro-retinitis and the errors of refraction are mentioned. In regard to headache in neuro-retinitis, we think the writer is in error. If headache is associated with neuro-retinitis, it is not due to the retinal affection, but some intra-cranial trouble is the common cause of both

headache and retinitis. Br. Carter, in his lectures, very truly says, "Retinal affections, such as neuro-retinitis leading to nerve atrophy, and the like, are even characteristically painless. The attention of the patient is usually first called to them by the discovery that his sight is fading away without pain."

DR. WM. WATSON made a short report of an "Epidemic of Cerebro-spinal Meningitis," which occurred in Dubuque and vicinity, during the winter of 1871-2. It must be regretted that he had not kept accurate records of his cases to give a more complete account of his observations.

"Pollution of Drinking-water," by Dr. W. D. MIDDLETON, "Puerperal Convulsions," by Dr. C. H. RAWSON, and a number of other short papers complete this interesting volume.

3. The very modest volume of the *North Carolina State Society* contains a paper on "Diphtheria," by Dr. CHAS. DUFFY, JR., giving a synopsis of the literature, and reporting a number of cases which came under his observation.

DR. R. H. LEWIS follows, with a short report of "Cases of Ophthalmic Practice." He describes a case of corneitis for the sake of illustrating the injurious effect adstringent eye waters have upon the inflamed cornea: and a case of amblyopia from chronic alcoholism, which corroborated the usefulness of the phosphates in such cases.

DR. W. T. EMMETT has selected "The Life and Discoveries of Harvey," as subject for the annual address.

DR. R. L. PAYNE'S valedictory address is a discourse on "Maternal Impressions," the pith of which seems to be contained in the following utterance (p. 100): "The very fact of the prevalence of a strong belief in 'maternal impressions' among the women themselves, although not a positive proof of its truth, is, at least, a forcible presumptive evidence in its favor." Sic!

4. By an act of the general assembly in 1875, the *Medical Association of Alabama* was constituted a permanent Board of Health of the State, and the county societies affiliated with the medical association, were made the Boards of Health for their respective counties, under the direction and control of the association. For this reason, sanitary topics figure largely in the transactions of this society. The president, PETER BRYCE, made

"Public Hygiene" the subject of his annual message; Dr. GEO. A. KETCHUM spoke of the "Value of Health to the State;" and the Board of Censors, as a committee of public health, gave a lengthy report of the Quarantine Convention which was held at Jacksonville, Florida, in February of this year.

"Hermaphroditism" is the title of a very elaborate dissertation by Dr. JEROME COCHRAN. By the same author is the following paper: "What is Puerperal Fever?" His answer is that puerperal fever is not a disease *sui generis*, but a symptomatic fever attendant upon erysipelatous, pyæmic, or septicæmic affections in puerperal women. This doctrine is now adopted by most writers, but at the time the paper was first read before the Mobile Medical Society in 1875, there was still some diversity of opinions in regard to the nature of puerperal fever.

A lecture on "The Ophthalmoscope and its Uses," by Dr. W. H. SANDERS, and one on "Endometritis," by Dr. W. H. JOHNSTON, conclude the volume.

F. C. H.

A PRACTICAL TREATISE ON THE DISEASES OF THE EAR, INCLUDING THE ANATOMY OF THE ORGAN. By D. B. St. John Roosa, M. A., M. D., etc. *Fourth Edition*. New York: Wm. Wood & Co. Chicago: Jansen, McClurg & Co.

From the brief advertisement of this edition we learn that, with the exception of the Chapter on Diseases of the Internal Ear, "the work remains as in the last impression." In view of this, together with that other fact that the profession is already quite familiar with the former editions of this excellent treatise, we do not think an extended review of the work is called for at this time.

The appearance of a fourth edition of the work in less than five years from the time it was first issued, is certainly sufficient evidence of its popularity.

We regret to find that of a number of errors which appeared in the first edition, several still remain in this. A few mistakes in a new medical work can easily be excused, but to continue them through a fourth edition, if not censurable is certainly inexcusable.

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On page 186, in describing the membrana tympani, the author says: "The handle of the malleus divides the membrane into two parts. The anterior part is larger than the posterior." If this be true, we would suggest that the author have the wood cuts on the opposite page as well as the chromo-lithograph, representing the normal membrane changed. Errors which appeared on pages 201 and 217 have been corrected. Page 305, solution of iodine should be solution of iodide of potash. Page 465, the length of the horizontal semi-circular canal is given as being 5 millimeters. While these errors, with others of like character, are not sufficient to seriously impair the value of the work, it does seem that they should have been corrected.

The chapter on diseases of the internal ear has received valuable additions in the way of clinical histories and a more extended discussion of several diseases. In the management of inflammation or hyperæmia of the internal ear, the author very properly suggests that possibly not enough attention has been paid to the protection of the ear from noises. It certainly appears reasonable that rest, a factor so important in the treatment of inflammations of other parts, should not be ignored here.

If there is a doubt as to the cause of the inflammation, the importance of giving the patient the benefit of the doubt by instituting a thorough anti-syphilitic course of treatment is emphasized.

As to electricity, Dr. Roosa still thinks that as an aid in diagnosis it is of no great value, and as a remedial agent he says: "My own experience has been purely negative."

While it is to be hoped that another edition will not appear without a more extended revision, making additions that the progress of the science demands, and wiping out all errors of former editions, we still think that the work has not lost prestige—that it still remains the best practical treatise on diseases of the ear.

W. T. M.

WALSH'S PHYSICIANS' HANDY LEDGER. A Companion to Walsh's Physicians' Combined Call Book and Tablet. By Ralph Walsh, M. D. Chicago: W. T. Keener.

This book is doubtless already known to many of our readers.

It greatly facilitates the work of book-keeping for the physician. It is arranged with lines and columns on the one page for the number of calls, and corresponding lines and columns on the opposite page for the necessary particulars. Those who meditate a change in their system of booking will do well to become acquainted with it.

R. T.

BOOKS AND PAMPHLETS RECEIVED.

Record of Medical Observations. XXIII edition. (Prescription blanks; metric system.) New York. Edward Seguin, M.D.

Notes on the Treatment of Skin Diseases. By Robert Liveing, A.M., M.D. 4th edition. Revised and Enlarged. 12mo., cloth; pp. 127. New York: W. Wood & Co. 1878

Diseases of the Bladder and Urethra in Women. By A. J. C. Skene, M.D. Cloth; 8vo., pp. 379. New York: W. Wood & Co. 1878.

Walsh's Physicians' Handy Ledger: a Compilation of Walsh's Physicians' Combined Call Book and Tablet. By R. Walsh, M.D., Washington, D. C. Chicago: W. T. Keener, 94 Washington street.

Walsh's Physicians' Combined Call Book and Tablet. 4th edition. W. T. Keener, 94 Washington street, Chicago.

The Illinois State Medical Register for 1878-9. Published annually, under the supervision of the Chicago Medico-Historical Society, with the co-operation of the Ill. State Med. Society. By D. W. Graham, M.D. Vol. IV. Chicago: W. T. Keener, 94 Washington street.

Medical and Surgical Directory of the State of Iowa for 1878-9. By Ch. H. Lothrop, M. D. Cloth; pp. 155.

Fifth Annual Report of the State Board of Health of the State of Michigan for the Fiscal Year ending Sept. 30, 1877. Cloth; pp. 503.

Physician's Pocket Day Book. By C. H. Leonard, M. D. Chicago: Jansen, McClurg & Co.

A Therapeutical Inquiry into Rational Medicine. By S. W. Whitmore, M.D.

Case of Sarcoma of the Kidney in a Negro Child. By W. H. Gedding, M. D. Reprint from Gynecological Transactions.

State of Illinois, Cook County, Circuit Court; Decision rendered by Hon. E. S. Williams at the October term of Court, 1878; Nathan J. Aiken vs. State Board of Health. Twenty copies.

Report on Malpractice. A paper read before the Maine Medical Association June 12, 1878. By Eugene F. Sawyer, A. M., M. D.

Clinical Lectures on Surgery, delivered at Starling Medical College. By J. H. Pooley, M. D. Reprint from *Ohio Medical and Surgical Journal*.

Forms for the Taking of Throat Cases, with Outlines of Fauces and Posterior Nares and of Larynx, as seen in the Mirror, and with a Tabular Statement of the Differential Signs of Various Laryngeal Diseases. Also, for the Taking of Aural Cases, with Drawing and Outlines of the Membrana Tympani, of Fauces and of Posterior Nares, and with a Short Explanation of the Significance of Various Aural Symptoms. By Lennox Browne, F. R. C. S., editor.

Treatment of the Fracture of the Shaft of the Femur. The American Method. A paper read before the Minnesota State Medical Society, at St. Peter, June 18, 1878. By Franklin Staples, M. D. Reprint from the Transactions of the Society, 1878.

The Spontaneous and Artificial Destruction and Expulsion of Fibrous Tumors of the Uterus. By W. H. Byford, M. D. Reprint from Vol. I, Gynaecological Transactions, 1876.

Fibrous Tumors of the Uterus. By W. H. Byford, M. D., Chicago. Vol. III, No. VII of a Series of American Clinical Lectures. Edited by Ed. Seguin, M. D.

Medical Missions at Home and Abroad. By J. G. Kerr, M. D.

Prevention of Disease, Insanity, Crime and Pauperism. A paper read before the Conference of Charities at Cincinnati, May 27, 1878. By Nathan Allen, M. D.

Observations on Nasal Catarrh and Catarrhal Deafness. By W. A. Williamson, M. D.

Case of Poisoning by Oil of Chenopodium. By Thomas R. Brown, M. D. Reprint from the *Maryland Medical Journal* for Nov., 1878.

The Relation of Ozone to Disease: Prize Thesis. By J. F. Baldwin, M. D. Reprint from *Ohio Medical and Surgical Recorder*, Oct., 1878.

Discours Prononcé à la re-ouverture des Cours, le 1st Octobre, 1878. Par T. E. D'Odé D'Orsonneus, M. D.

Restoration of the Membrana Tympani. By S. O. Richey, M. D. Extracted from the Transactions of the Illinois State Medical Society. Springfield, May, 1878.

The Nurse Maid and Mother of the Syphilitic Child. (A Clinical Lecture delivered at the Dermatological and Venereal Clinic, Rush Medical College.) By James Nevins Hyde. Reported by L. C. Waters, clinical assistant.

Restriction and Prevention of Diphtheria. Document issued by the State Board of Health of Michigan.

Relative Frequency of Color Blindness in Males and Females. By B. Joy Jeffries, A. M., M. D. Reprint from the *Boston Medical and Surgical Journal*, July 25, 1878.

The Local Treatment of Eczema. By Henry G. Piffard, M. D. Reprint from *The Medical Record*, Oct. 26, 1878.

On Gastro-Elytroto.n.y. By Henry J. Garrigues, M. D. With three woodcuts. Reprint from *The New York Medical Journal*, Oct. & Nov., 1878.

Apparatus for Transfusion. Asphyxia in New-Born Children Considered from a Medical and Legal Standpoint. By H. J. Garrigues. Reprint from *American Journal of Obstetrics and Diseases of Women and Children*, Vol. XI, No. IV, Oct., 1878.

TOO LIBERAL INDEED !—We read in the *Medical Press and Circular*, of an extraordinary liberality on the part of London hospitals, which we would not advise our hospital authorities to adopt: "The out-patient department of St. Thomas' Hospital is very extensive, the total attendances during the last year being nearly 140,000. Some of these patients come from considerable distances, and are necessarily detained at the hospital, waiting their turn in rotation for medicine, etc. It frequently happens that they become faint before leaving the hospital. In view of this, the treasurer and committee have made arrangements for supplying them with refreshments, such as tea, coffee, milk, rolls, cakes, etc., at a small fixed charge, so that such as require it may obtain a single meal at a small cost. * * * Somewhat similar arrangements have been adopted at Guy's Hospital."

As the *Press and Circular* says: "There is such a thing as being too kind and we should like to be sure that such hospitality will not rather attract than keep away those applicants who can well afford to pay for the advice they require."

A FACT of some medico-legal importance is asserted by Dr. Gellè. The tympanic cavity of a foetus at term is filled with a gelatinous fluid. If a child has breathed an hour or two, the tympanum will be found to contain air.—*Med. Press & Circular*.

Selection.

THE CRITICAL PERIOD OF HOMŒOPATHY.

BY H. M. PAINE, M. D., ALBANY.

[The following article, taken from the *Homœopathic Times*, is here reproduced as an interesting evidence of the fact of the decadence of homœopathy. The tidal wave, which long since ebbed away from the shores of the old world, and which but recently was at its flood in America, is evidently doomed to complete disappearance. The misstatements here made relative to regular medicine, require no refutation; nor need the readers of this journal be told that the term "allopathic," which is so frequently repeated below, always has been and always will be utterly repudiated by the true physician. Ed.]

Dr. E. M. Hale published an article in the November (1877) number of the *American Homœopathist*, entitled, "A Critical Period for Homœopathy," in which he clearly sets forth the danger to our school from the adoption of homœopathy by old school physicians, *without an open acknowledgment to that effect*. This article is strongly supported by indisputable evidence, and clearly points out the influences which are accomplishing the destruction of the homœopathic school, *as a separate and influential body of medical men*.

Accessions to our ranks are derived from only *two* sources: those who are educated under homœopathic auspices, and converts from the so-called regular school. Of the first class named, those who have graduated from our own medical schools, there were the present year only three hundred and nineteen,* a number so small as to be scarcely sufficient to fill the places made vacant by death and other causes. It is plainly apparent, therefore, that recruits from this source must be largely increased, or else we

* Investigator, May 1, 1878.

must depend chiefly on the second class mentioned, viz., converts from the so-called regular school.

On even a cursory examination in this direction, the result is exceedingly unpromising. Those of us who were participants in the contest between the two principal rival schools can vividly recall the scenes which occurred twenty and even fifteen years ago. Then there were constant accessions to our ranks from those of our opponents. Desertions were so numerous as to impair the strength of allopathic legal organizations, and, in some localities, seriously threaten their existence. At the present day the exodus has nearly ceased. The comparatively few converts who are willing, openly, to admit their belief in homœopathy, may be numbered by tens, while formerly there were hundreds.

In looking for the causes which have brought about this result, we find that they are mainly due to the adoption of a wise and liberal policy on the part of the allopathic school toward its own members. During the past ten years instances of the resort to discipline for practicing homœopathically, have been of very rare occurrence. The so-called regular school has virtually abolished all rules having reference to the infliction of a penalty regarding matters of medical belief. Its members are now freely allowed the privilege of believing and practicing all systems of treatment extant. It has practically adopted the wise suggestions recommended by Dr. Dunham, in his admirable address, delivered before the American Institute of Homœopathy, in June, 1870, regarding "Liberty of opinion and action."

This prudent and liberal policy has enabled our opponents to retain very large numbers of physicians who would otherwise have united with homœopathic medical societies.

By this radical change of base our rivals have largely promoted the popularity and numerical strength of their own school. Strange as it may appear, is it not on account of the adoption of this liberal policy, that the accessions to the number of homœopathic physicians are mainly within the membership of the so-called regular school? While the number of physicians who are willing to publicly announce their belief in homœopathy may be diminishing, the number who are *actually* practicing homœopathically is *steadily increasing*.

I am acquainted with a number of allopathic physicians residing in this city, all of them in good standing in their own medical society, who have practically adopted homœopathy.

One of my patients, a mother of several children, resided the past summer with her family thirty miles distant from Albany in the country. She at first expressed unwillingness to take her family so great a distance from reliable homœopathic aid. But, on applying to the allopathic physician, a young man of decided ability residing in the neighborhood, was pleased to find that he carried a case of remedies like those used by homœopathists, and that he prescribed remedies which were quite as pleasant to the taste as any she had ever received from homœopathic sources. When twitted of being a convert to homœopathy he merely replied, "That the progress of regular medical practice had been very rapid of late years."

The trustees of the Albany (allopathic) hospital recently adopted a resolution allowing physicians of any school the privilege of treating pay patients at the hospital. The adoption of a provision so eminently just and reasonable is a result of the influence of public sentiment in behalf of *liberty of opinion and action*, as against the illiberality and sectarianism of the allopathic school, which, hitherto has been the principal barrier to the acceptance and adoption of homœopathy on the part of its more candid and unprejudiced members. Viewed in this light, it is a gratifying testimonial to the practical superiority of homœopathic principles.

The time has come, sooner than many of us anticipated, when the so-called regular school refuses longer to discipline those of its members who may adopt and practice homœopathy. This evidence of toleration on the part of that conservative fraternity is highly commendable, and worthy of imitation by our own school. While we rejoice in the promulgation of homœopathic principles, can we not easily perceive in this *coup d'etat* an element which will effectually prevent the further growth and prosperity of the homœopathic school as a *distinct and influential organization*?

Whatever the influences have been which have checked the outward development of homœopathy, it is plainly evident, that the homœopathic school, as regards the number of its openly

avowed representatives, has attained its majority, and has begun to decline both in this country and in England.

The February number of the London monthly *Homœopathic Review* contains the following significant statement: "The number of those who are ready to assert their confidence in homœopathy may not have increased of late years—it may possibly have diminished—but that of those who have a confidence in homœopathy which they lack the courage to assert, has increased to an extent we have no means of calculating."

Dr. Drysdale, in the January number of the *British Journal of Homœopathy*, writes very despondingly: "Our numbers are not only not increasing in proper ratio, not even increasing at all, nay even *actually diminishing*."

Regarding the foregoing quotation, the writer in the *Monthly Review* offers the following explanation: "To prove his case he (Dr. Drysdale) examines the homœopathic directories issued since 1853, and if their contents were any evidence at all, his conclusions would be incontestable. But such evidence as they are capable of affording is worthless in endeavoring to estimate the extent to which homœopathy is practiced in this country, or the number of those who, more or less habitually, prescribe homœopathically for their patients."

The doctor then proceeds to relate several instances which have fallen under his own personal observation, of old school physicians who have practically adopted homœopathy, while still retaining professional good standing in their own medical associations. He then continues:

"We might multiply very many fold such illustrations of the diffusion of homœopathy, of its practice by men never suspected to have adopted it. * * * * * That such should be the case is to be regretted chiefly because it shows a great weak morale to be more prevalent in the profession than is consistent with the scientific progress of our art. But it is no evidence that the practice of homœopathy has retrograded. On the contrary, it is a step in advance; it represents a period in the history of homœopathy through which it must pass, ere it meet with a general, an acknowledged acceptance throughout the profession."

Dr. Hoyne, in an article read before the Illinois Homœopathic

Medical Association, states that the number of homœopathic physicians in Illinois has scarcely increased, perhaps actually diminished during the past five years, while the population of the State, during the same period, has more than doubled.

Dr. Bruce, in his directory for 1878, furnishes the names of nine hundred and fifty homœopathic physicians residing in the State of New York. Making allowance for numerous inaccuracies, it is probable that the actual number is not far from eight hundred, a very moderate increase if any (*Investigator*, Mar. 15, 1878), perhaps an actual decrease during the past decade; while during the ten years ending July, 1875, the population of the State increased twenty-three per cent.

The increase of population in fifteen of the Northern and Eastern counties of the State of New York, during the past ten years, is sixteen per cent., while the number of homœopathic physicians residing in those counties, has not proportionately increased, probably has not increased at all.

Dr. Bruce states in his directory, edition of 1878, that he has the addresses of over 5,000 homœopathic physicians residing in the United States. Dr. Hoyne, in his directory of 1878, also states that he has the addresses of the same number of homœopathic physicians. This is no larger than the estimated number of homœopathic physicians twelve or fifteen years ago.

After a careful examination of the most recent sources of information, we are forced to the conclusion that there is, in all probability, a gradual decrease in the number of homœopathic practitioners, and, if not an actual decrease, that the ratio of increase is far below that of the population in this country.

In view of the foregoing statements, are we not justified in concluding that the period has at length arrived for homœopaths to seriously consider whether it is desirable longer to maintain separate medical organizations and institutions? For, if the powerful influences which are now in active operation continue unchecked, will not the efficiency and influence of the homœopathic school, as a distinct body of medical men, be greatly impaired, and its ultimate disintegration merely a question of time?

If it shall be deemed important, on the part of members of

the homœopathic school, to maintain separate organizations, it is a matter of very great moment that measures be speedily devised and put in operation by which larger accessions to our ranks may be secured from the younger members of the allopathic school. A large proportion of the older members are zealous advocates of the allopathic system, and few of them can be induced to adopt homœopathy; but this is not true of the younger members. These constitute the large class who, at the present time, are secretly and openly practicing homœopathy while still retaining membership in allopathic associations.

Let us carefully examine this subject and endeavor to ascertain what motives induce these young physicians to unite with allopathic medical societies. • Why do they prefer allopathic fellowship rather than homœopathic? Many of the younger members of the profession have a decided predilection for homœopathy; it is obvious, therefore, that the motives which induce them to unite with allopathic societies are of great influence and power. It is also evident, that membership in homœopathic medical societies is unpopular; and that, in order to turn the tide in our favor, very decided measures must be speedily put in operation. Is it not reasonable to presume that large numbers of physicians who are now practicing homœopathically under allopathic auspices, could be persuaded to unite with homœopathic societies, where they more properly belong, and where they will obtain a clearer and more thoroughly practical knowledge of homœopathy?

In view of the importance of the new and critical situation in which our school is placed, is it not desirable, in fact necessary, that concerted action be taken and that vigorous effort be made to prevent the threatened extinction of homœopathic societies and institutions? Should we not at once open the doors of our medical societies to all educated medical men, and encourage them to unite with and assist us in promoting the advancement of medical science in all its departments! Have we pursued this liberal and unsectarian policy in the past?

Nay more, are we not at the present moment exhibiting a spirit of intolerance by rescinding liberal and unsectarian declarations of faith and practice?

Have we not given medical men to understand that they were

not wanted until willing to acknowledge before the public their belief in homœopathic principles? Have we not thereby actually erected a *sectarian barrier* to full professional fellowship, which ought never to have existed, and which is now proving decidedly disadvantageous to the development of our school, and is rapidly sapping its life blood? Is it wise to longer restrict membership to those physicians only who can accurately pronounce the shibboleth of doctrinal belief?

But this is not all. Have we not, as a school, followed Hahnemann into the mazes of medical transcendentalism? Have we not, and are we not now endeavoring to associate with true homœopathy that which is false, visionary and fanciful? I refer particularly to theoretical errors of the minimum dose and dynamization of medicinal and non-medicinal substances. Although these errors of theory and practice have never been accepted by many homœopaths, yet, having never been discarded by a formal declaration to that effect, have they not largely contributed to the tardy adoption of homœopathic principles?

Ought not these important questions, at this critical period in the history of our school, to be speedily and seriously considered by the whole homœopathic profession?

A FAIR INFERENCE.—A lady's-maid visiting with her mistress at the residence of a celebrated surgeon, then deceased, noticed the classic invitation, "salve" upon the hall floor, and in the parlor a picture of Cleopatra applying the asp to her beautiful bosom. Whereupon, with that quick but not always correct woman's intuition about which we hear so much now-a-days, she confidently, but in all innocence inquired, "Dr. — was a physician, was he not? I felt sure he was when I saw *salve* on the entry floor, and then that poor thing in the parlor, with her broken breast and the leech in her hand. I knew he must have been a doctor."—*Archives of Clinical Surgery.*

Summary.

Collaborators:

DR. H. GRADLE, DR. L. W. CASE, DR. R. PARK,
DR. R. TILLEY, DR. D. R. BROWER.

PRACTICAL MEDICINE.

THE ETIOLOGY OF TYPHOID FEVER. By Prof. Huguenin.
(*Corresp. Blatt. f. schweiz. Aerzte.*, 1878, Aug. 1.)

On the 30th of June, 1878, the festival of the singing societies of the district was celebrated in Kloten (Canton Zürich, Switzerland), with a very large attendance. The meals were served at the hotel "Zum Wilden Mann," where about 800 to 900 pounds of viands, partly roast veal, partly sausages, were consumed. Since a large portion of the viands was found somewhat unpalatable, it was distributed gratuitously. It is not yet known where all the meat was obtained, but so much is certain, that at least one calf used was sick before it was slaughtered. The liver and brain of that calf had been consumed in the village Seebach, and had caused illness of the consumers. The rest of the carcass was sent to the hotel at Kloten.

This veal turned out to be infectious. The second day after the festival a number of inhabitants of the neighboring villages complained of nausea, anorexia, headache, fever, abdominal pains and meteorism. The first cases seem to have been the least severe; at least, a number recovered after a few days. More commenced on the third and fourth days, but most from the fifth to ninth day. The first 40 to 50 instances proved the veal to be the source of the infection. Pork had also been consumed that day,

but no case could be traced to it. A large number of persons had visited the celebration, but only drank wine, and none of them became infected. Others had partaken of the water without evil consequences. Many of the patients, on the other hand, declared that they had not even tasted water the entire day. Those who had partaken of the three different preparations of the meat were most seriously stricken, while the less severe cases had eaten only one kind of meat. Many, who had induced vomiting by excessive drinking, remained healthy.

The disease caused by this meat was typhoid fever (abdominal typhus). The fever followed the typical course in most cases. But all observers noticed the tendency to mental troubles, furious delirium, with a rather low febrile movement, and rapid favorable course. The delirium continued, in many instances, after antipyretic treatment had removed the fever. Another characteristic feature of the epidemic was enormous tumefaction of the spleen.

In four fatal cases, the autopsy has revealed all characteristic lesions of typhoid fever.

As a noticeable event, Prof. Huguenin adds, that several instances of genuine typhoid fever have occurred in calves in the barns of some of the patients.

THE NATURE OF SCIATICA. M. Fernet. (*Lyon Médical*.)

The author has pursued his researches which go to prove that primitive spontaneous sciatica, ordinarily due to a local chilling, should not be considered as a simple neuralgia, that is to say, as an affection without appreciable anatomical lesion, but rather as a veritable neuritis. Exposing the results obtained in the *Archives de Médecine*, M. Fernet remarked that he relied chiefly for the establishment of his opinion upon three clinical characters: the direct examination of the nerve by palpation, the frequent existence of trophic troubles, and the course of the disease. Recently, in the case of a man in his wards affected with sciatica, he had occasion to examine *post mortem*, the state of the diseased nerve, and he found a manifest increase of volume, as well as a very marked injection of the nerve, but this augmentation of volume may be readily perceived during life. Here are the directions which M. Fernet furnishes upon this subject: The patient lying upon the

back with the thighs slightly flexed upon the pelvis, and the legs upon the thighs, is directed to keep his lower limbs at perfect rest and to make no effort. You then explore the sciatic nerves with the fingers, which are pushed rather deeply into the popliteal space at first, then proceeding progressively upwards to the sciatic notch. The fingers being well engaged in the depth of this space, their palm or face turned towards the outer aspect of the thigh, and their extremities being occasionally carried from within outwards, the sciatic nerve is very distinctly felt under the form of a cord, and when this is firmly pressed you are apprised of the fact by the sensation which the patient experiences, a sensation only unpleasant on the sound side, but painful and accompanied with tinglings in the leg and foot of the affected side. The palpation is only really difficult in very fat subjects, or when the sciatic is very painful: in this latter case, pressure on the nerve is intolerable, and provokes reflex contractions which prevent the exploration.

By this proceeding, carefully applied, there are frequently found very notable differences of volume between the healthy and the diseased side, the nerve of the affected side appearing larger than that of the sound, a difference of consistence, the nerve of the affected side being harder than that of the sound side; a difference of form, the nerve of the affected side forming a cylindrical cord which pressure does not modify, whilst the nerve of the sound side appears to allow itself to be flattened out and even dissociated. The lesion which is thus discovered may, moreover, be confined to certain points of the nerve.

The nature of the pain, which is continuous, persistent at first, dull, and gradually intensified, limited to the nerve trunk, or even to a part of the trunk without constant peripheral radiations is also, according to M. Fernet, a further proof of the existence of a nerve-inflammation. The defects of nutrition, which, as M. Charcot has shown, are dependent upon inflammatory lesions of the nervous system, are not wanting here. There is often muscular atrophy of the leg and thigh, easily appreciated upon measurement.

At the same time with the muscular atrophy there is a thickening of the subcutaneous cellular tissue by a deposit of fat; these

two states appear to be in habitual connection with one another; and in order to appreciate this adiposis, it suffices to take up at symmetrical points on the two thighs or the two legs, a fold of the skin, and to pinch it moderately between the thumb and finger; you can then very readily recognize the greater thickness which exists on the diseased side: this thickening may be sufficiently great to mark the atrophy and to give to the limb a rounded form often noted in sciatica.

Zona, which is always an index of nerve inflammation, also sometimes appears in sciatica; lastly, the evolution of the disease may also be invoked, as being contrary to the hypothesis of a simple functional trouble devoid of lesion.

In a therapeutic point of view, it results hence, that if it be admitted that primitive, spontaneous sciatica is usually a neuritis, a resolutely antiphlogistic medication will be employed against it: absolute rest, leeches, wet cups in the course of the nerve, vesicating strips at the back of the thigh, cauteries, etc., will be the chief means of treatment.

SURGERY.

FOREIGN BODY IN THE RECTUM: SUCCESSFUL REMOVAL. *Hospitals Tidende. (Canad. Jour. Med. Sci.)*

A man, æt. 35, introduced into the rectum, open end uppermost, a preserve bottle nearly seven inches long, for the purpose of stopping a diarrhoea. The next morning he complained of pain; chloroform was given, and the bottle, which could before this be felt in the rectum, passed higher up. It could now be felt through the abdominal walls, in the middle line, with the bottom just above the pubis. He was again anæsthetized and posterior linear rectotomy performed; but efforts to reach the bottle in this way were unavailing. Abdominal section was then made in the linea alba. The gut was divided over the bottle, and removal slowly effected. The neighboring parts were protected from escape of feces by sponges and compresses. The gut was closed with catgut sutures. Recovery was slow and com-

plicated by local peritonitis and abscesses ; but the patient was discharged *cured* in less than fourteen weeks.

The reporter, Dr. Studsgaard, refers to three other cases of a similar character reported by Ogle, Closmadeuc and Reali ; this, with the others, making a group of rare and curious cases.

ACTION OF PARENCHYMATOUS INJECTIONS OF GLACIAL ACETIC ACID ON CARCINOMA. Dr. Gies. (*Centralblatt f. Chir.*, No. 19.)

The author injected diluted glacial, acetic acid (1 : 3 aq. destil.) into a recurrent carcinoma, as large as a hen's egg, seated in the right side of the inferior maxilla ; the injection excited suppuration, and the tumor was diminished to the size of a hazelnut. A primary carcinoma, as large as a hen's egg, situated beneath the ear of the same patient, was treated in the same way, and after 21 days had almost entirely disappeared ; 25 syringefuls were injected before this tumor suppurated. A carcinoma as large as a hen's egg, situated in the left breast of a woman, suppurated after 10 injections, and in the course of a month had shrunk to a nodule about the size of a hazlenut.

TREATMENT OF BURNS.

Many of the journals of the day have allusions to the use of a solution of sodic bicarbonate as a local application to burned surfaces, however large. Some of their readers have tried solutions of varying strength, and not a few have written that they were disappointed. In order to produce the desired effect, it is necessary to use a *saturated* solution, 1 pt. to 6, or thereabouts, and apply it on lint or other suitable dressing. This in many cases gives almost instantaneous relief.

OBSTETRICS.

A NEW DEVICE FOR ARRESTING POST PARTUM HEMORRHAGE. Christie. (*Med. Press & Circular*, Sept. 4, '78.)

This consists of an india-rubber bag of about a pint capacity, having a tube and stop-cock attached. The air is pressed out of

the bag, the valve closed, and the former introduced into the uterine cavity. The end of the tube is then opened in a basin of tepid water, at a height of two or three feet above the uterus. By atmospheric pressure it will be filled in a few seconds, and by regulating the height of the water supply, the pressure in the bag can be made to counteract the intra-arterial pressure. By keeping the valve open, the uterus expels from the bag, as it contracts, the requisite amount of water, and if it relax in the after pains, the water readily re-enters, and the pressure is always the same. In post partum cases the outside of the bag should always be smeared with glycerine. The author uses the same instrument in cases of placenta prævia, only filling it with cold instead of tepid water.

OPHTHALMOLOGY.

RETINAL PHOTO-CHEMISTRY. (*Br. Med. Journ.*, Aug. 31, 1878.)

In 1870 Boll discovered that the retina is only absolutely colorless and transparent for two-thirds the depth of its lowest layer, and that for the lowest third of the rods it is plunged in a purple-colored substance; this coloration having been long unknown, because the mere access of light destroys it, decolorizing it with extreme rapidity. The study of this substance—the retinal purple—and its modifications by light, led the author to these formal conclusions: That the action exercised upon the retina by light is of a chemical order, and the formation of images a true photography. Very positive images of objects before which the eyes have been exposed immediately before and after death, put this fact beyond contest. Light effaces and destroys this retinal purple, but it is physiologically re-secreted during life in proportion as it is decolorized.

Soon after these experiments and their verification, Kühne sought and discovered the organ of the incessant reproduction of this retinal purple. This organ is the mosaic layer, or hexagonal epithelium of the choroid, which must now be definitely attached

to the retina itself, under the name already proposed by several anatomists, of retinal epithelium.

M. Giraud-Teulon, in a recent report to the Académie de Médecine, in which he discusses the new state of facts, develops the new considerations which it introduces into the pathological theory of the production of color. Thus, so far as concerns the persistence of positive images—that is to say, the survival of the sensation after the impression which has produced it—the very fact of the chemical decoloration of the retinal purple by light, implying a certain time for its reconstitution—or the secretory regeneration of it by the hexagonal layer—sufficiently accounts for the greater or less persistence of the image.

As to the accidental negative images and their successive colored phases, the perfectly arbitrary explanation of the three orders of fibers, of Young, is naturally supplanted by the following mechanism. A given monochromatic light chemically alters in a constant and uniform manner the retinal purple which it encounters. The rod or primitive nervous element plunges its foot into the bath formed by this substance. The whole hypothesis is, therefore, limited to admitting that this nerve element possesses the faculty of being affected in a different manner by the intimate contact of different media, just as is the case with the papillae of the nerves of special sensation; just as the gustatory and olfactory nerves, for instance, appreciate or carry to the sensorium incitations as varied as the nature of the liquid or effluvia which attack their expansions. Inversely, when the primary cause—the luminous object—has been removed, the nerve fiber, in proportion as the chemical reconstitution of the retinal purple proceeds, testifies to the gradual revivification of the normal bath.

M. Giraud-Teulon concludes by indicating the resources which pathological physiology will find in the photo-chemical theory of vision, for the reformation of the theory of Daltonism, and the explanation of other normal and morbid phenomena in the history of colored entoptic sensations.

This "vision red," or purple, or *erythopsin*, as its discover names it, attains its maximum after a night's rest or sleep, or when an animal has been kept for some hours in darkness; it is soluble in solutions of the biliary acids and in glycerine; and

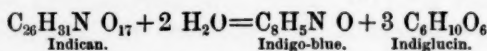
probably plays a part in the red reflection from the fundus of the eye seen in ophthalmoscopic examinations of the eye.

PATHOLOGY.

RENAL CALCULUS LARGELY COMPOSED OF INDIGO. (*Br. Med. Jour.*, July 27, 1878.)

In a clinical lecture at St. Thomas' Hospital, Dr. Ord exhibited two calculi, removed from the kidneys of a patient dying of malignant disease, one of which consisted very largely of indigo. That there was here no mistake, the application of several tests as well as spectrum analysis conclusively proved. More definitely, the calculus consisted of a matrix of calcic and magnesian phosphates, with a few remains of blood clot, the matrix being everywhere penetrated by indigo-blue and a little indigo red, while indigo blue was deposited in large proportion as incrustation.

With reference to the ætiology of this rare formation, the following is summarized from his lecture. Indican and indigo-blue are formed spontaneously in the urine, or by aid of acids and oxygen; hence the test for indican. As Schunk explains the process, it is thus :



Indigo-blue has been found in the blood of man and animals. The appearance of indigogenous material in urine may be explained in two ways; it may be due to the ingestion of indigogenous material, or to the breaking down of nitrogenous matter in the body. The use of carbolic acid and creosote is often followed by a blackening of the urine, due to the above. The urine of starving animals, also, often contains it. It may be a derivative of blood pigment, or of albuminous bodies. Long ago Dr. Hassal pointed out the chemical similarity between the coloring matter of urine, indigo and blood pigment. Recent observations give reason to believe that indigo-blue in the urine is connected with the formation and subsequent oxydation of indol ($\text{C}_8\text{H}_7\text{N}$) in

the system. Indol is one of the results of the action of pancreatic juice on peptones, and is found in the fæces, which owe much of their odor to it. Its subcutaneous exhibition is followed by appearance of indigo blue in the urine. Pus, also, has often a greenish or bluish color, which is caused by the same material.

Comparing experimental with clinical observations it may be inferred that several conditions will cause excess of indigo in the system ; defective gastric and intestinal chemistry, intestinal obstruction, diarrhœa, suppurations anywhere, but especially in the urinary tract, and morbid processes involving degeneration (amyloid, especially) or destruction of albuminous tissues or blood. In cholera obstruction, and in typhoid the quantity of indigo yielded by the urine is often very large.

It was suggested that, in this case, the indigo was found in the suppurating left kidney in the presence of an alkali, was absorbed and carried by the blood to the right kidney, and then deposited in the presence of uric acid. This was considered plausible. The patient had taken a little creosote, and he was markedly cachectic ; thus the conditions were all favorable.

ON EXCISION OF THE PRIMITIVE SCLEROSIS OF SYPHILIS.
Prof. H. Auspitz. (*Vierteljahresschrift für Derm. u. Syph.*, 1877.)

The author gives the history of 33 cases in which he excised the primitive induration. The operation was never followed by any evil result either local or general. On the contrary, locally, the cicatrix was often seen to present no induration, and when the excision did not prevent the outbreak of secondary accidents, there was always a delay in their appearance and a certain benignity.

In the 33 cases three were null ; two were lost sight of and one had roseola at the time of operation, the object being microscopic examination of the ulcer.

In 20 cases no syphilitic manifestation appeared after excision ; in 10 others secondary lesions appeared, with the benignity of character already mentioned.

In all these observations, taken for the most part from the

polyclinic at Vienna, the patients were followed four months, and sometimes eighteen months.

Auspitz concludes thus: "To prevent syphilis it is necessary to excise the initial sclerosis. It is necessary that this sclerosis should be recent, and not have presented other complication than the indolent inguinal adenitis which is always observed; it is necessary also that the operation and the dressings may be made easily."

THERAPEUTICS.

THERAPEUTICS OF DIPHTHERIA DURING THE YEAR 1877.—
Ferrand. *L'Union Médicale*, July 9, 1878, page 37.

"The treatment of diphtheria is a question always open and always present, and unfortunately the constant progression of this terrible malady, of which the frequency and gravity appear to increase from year to year, imposes upon every physician the duty of devoting his attention to it." (Cadet de Gassicourt, in *Bull. de Thérap.*) Readers of the *Union Médicale*, in which the statistics are published every three months, by M. Besnier, may judge that these words are not exaggerated; they will then justify the care taken to observe the progress and the acquisitions of therapeutics in a matter where it may render such great services.

In presence of a disease in which the product possesses in a high degree, specific characters, it would seem that the search after a specific remedy should be permitted, and should be encouraged. Without wishing to introduce here this grave question of morbid specificity, we may be permitted, nevertheless, to observe, that there are diseases more specific still than diphtheria, less obscure in their causes, more constant in their effects, and in face of which one should give up the search after a specific remedy, and strive on the contrary, to progress in the rational search after agents capable of modifying the seat or physiological form of this disease.

The current which at present draws us toward anti-septics, is felt especially in the therapeutics of diphtheria. In presence of

a disease of which the principal objective character consists in an excrementitial production, so to speak, which deposits itself upon certain surfaces, spreads after the manner of a parasite, decomposes to a putrid magma, very certainly capable of a septic resorption, nothing is more natural than to think of employing anti-septics.

The good effects which have resulted from the atomization of carbolic acid in catarrhal affections of the respiratory organs (see my last review, *The Therapeutics of Phthisis in 1877*), should encourage the employment of such a method in the treatment of diphtheria.

With the same end in view, Dr. Créquy has proposed to the Therapeutic Society, not only the application of tannin in powder or collyrium, as Trousseau did, but also a fumigation by means of boiling water in which tannin has been deposited. It is known that the vapor of water carries with it a notable portion of tannin in its natural state.

The salicylate of sodium, tried internally by M. Cadet de Gassicourt (loc. cit.), has given results of but slight importance. Salicylic acid had already succeeded no better in the hands of M. Bergron.

In another communication to the Therapeutic Society Dr. Soulez has extolled carbolized camphor, which is nothing but a solution of camphor and carbolic acid in alcohol: 25 grams of camphor in powder dissolved in a mixture of 1 gram of alcohol and 9 of carbolic acid, constituting this medicament, which is used pure, or mixed with oil of almonds. On touching frequently with this mixture the false membrane of croup, it is soon seen to wither and disappear, leaving a simple ulceration, which heals rapidly. It will be seen that it is not solely an antiseptic M. Soulez has hit upon. At any rate, the four happy examples which he cites to support his theory encourage further trials of his remedy. It is not surprising that, antiseptic and balsamic at the same time, carbolized camphor should arrest the alteration of the morbid product once formed, and modify advantageously the secretions of the mucous membrane upon which it is produced.

It is in this way, indeed, that the most significant effects have been proved, and it is by means of chlorate of potassium that

they have been especially obtained. Since the remarkable labors of our regretted colleague, Isambert, chlorate of potassium has been constantly used in the treatment of angina and croup. Dr. Seligmuller praises it anew, and insists upon the efficaciousness of solutions of this salt. He recommends giving this solution free from all mixture, every hour at least, and considers all other means as capable of some moral effect, useful for the friends, but without real benefit to the patient. Cessation of fetidity of the mouth, disappearance gradually of the false membranes, reparation of the ulcerations, and finally rapid amelioration of the general condition, these are the effects which Seligmuller attributes to the internal use of chlorate of potassium.

Guided by the favorable local action of chlorate of potassium, Isambert considered it as a very useful element in the medication of diphtheria. Our author makes almost a specific of it. Without going so far as that, it may be admitted that chlorate of potassium has only a direct local action on the false membranes; its passage after absorption into the salivary glands and into the pharyngeal mucous membrane, which appear to be its place of elimination, certainly explain in great part its utility in the diverse anginas, and in diphtheritic angina. This utility is a fact which I have proven many times. I believe less in a favorable action of chloride of potassium upon the nutrition and general state of the subjects. I have often observed that the stomach tolerated it with difficulty, and I have encountered patients who refused to take it. Seligmuller himself recommends looking after the heart and digestive functions, which this agent may injure. But these reservations well known, I think it one of the most precious agents for combatting a malady which resists so many others: it acts as a modifier of the secretions of the mucous membrane diseased, and as an antiseptic on the products secreted by this membrane. As to its general action, and the oxygen which it brings into the blood, deprived of this gas by the bacteria of diphtheria, it is a fact which remains to be demonstrated.

Furthermore, the divers communications which have been made to the Therapeutic Society agree in praising the use of chlorate of potassium in the treatment of diphtheria. Bucquoy R. Blache, and myself, have insisted upon its good effects. In the compara-

tive study which he has made in his service at St. Eugénie, on the use of chlorate of potassium, cubebs, and salicylate of sodium, in the treatment of diphtheria, Cadet de Gassicourt does not hesitate to accord the first place to chlorate of potassium, which he regards as much superior to the others, without giving it heroically or as a specific. In a word, if there is any specific action, it appears to be only local, from direct action at the moment of ingestion, or secondary, at the moment of elimination. It is a species of therapeutic specificity which perhaps does not merit the name, but which we have already distinguished from a true specific action.

Dr. Trideau has returned, in the *Gazette Hebdom.*, to the utility which there is in the use of cubebs alone, or with copaiba, in diphtheria. These agents, it is true, are not easily taken; but well masked in a potion like the following: 15 grams of powder of cubebs, 50 grams of syrup, and 50 grams of Malaga wine, or as dragées, etc., they may serve as excellent adjuncts to the treatment, always difficult, and in which the physician must often use as much firmness as knowledge. The action of the balsams upon the respiratory mucous membrane is too evident to refuse putting them to use in these cases; but it would be a grave mistake to use them as specifics.

I might say as much of the tincture of eucalyptus, which Dr. Walcher has used and recommended (*Gaz. Méd. de Strasbourg*). After having prescribed an ipecac, he gives a syrup composed of 10 grams of the alcoholate of eucalyptus in 38 grams of simple syrup. This dose may even be exceeded in the twenty-four hours. No doubt the very exciting action of eucalyptus may modify advantageously the general state of the patient, at the same time that its toxic action, direct and by elimination, bears especially upon the diseased points.

All these agents, it may be seen, are drawn from the domain of the modifiers of the secreting surface and of its products of secretion; it is a local alterant action, or an antiseptic influence which is especially sought in them. For a long time we have remarked into what discredit the caustics properly so called have fallen. Nevertheless, the elder Guillon does not appear to share this opinion; for, since 1828 he has not ceased to treat diphthe-

ritic pharyngitis by insufflations of powdered nitrate of silver. (*Gaz. méd. de l'Algérie*.) This physician recommends even to extend the insufflation not only to the diphtheritic surfaces, but also above and below them, and by that he thinks to prevent extension. I can scarcely share his confidence. Having seen many times with what facility diphtheria spreads to the mucous and even cutaneous surfaces, when they are the seat of any inflammatory irritation, and above all when they begin to ulcerate, I always feared that the action of the caustic, whether superficial or destructive, might offer to the diphtheria new surfaces which it is already too much disposed to invade, and to open with them new doors to septic or specific resorption. Therefore, for a long time I have employed as a toxic a collyrium made with powder of cinchona, as I have seen my preceptor, Dr. Delpech, do. With Rose Cormack elsewhere (*Edinburgh Med. Journ.*), I believe the most inoffensive toxics are the best; and I limit myself by preference to those which he advises; a mixture of glycerine and borax, or an acidulous solution (hydrochloric acid), or alkaline (lime water), or neuter (sulphate of sodium), all very dilute. I believe even that the passage from one to the other of these means is often useful, in face of an inflamed mucous membrane, of which the vascularization modifies itself better under the alternate action of divers toxics, than by an action always the same, whatever its efficacy.

CONCERNING THE ADMINISTRATION OF QUININE. (*The Doctor, Sept. 1, 1878.*)

According to Mr. Batterbury one grain of quin. sulph. dissolved in an ounce of milk hardly renders it bitter; two or three grains only slightly so. Five grains may be taken in a tumbler-full without any unpleasant sensations.

Mr. Collier proposes the use of the kinate of quinia for hypodermic use, this salt being soluble in three or four parts of water. He prepares a basic kinate from the calcic kinate, and adds to it, in solution, the quinia sulphate in powder, procuring the amorphous kinate by evaporation. This is subsequently readily prepared for use. It possesses the two great attributes of solubility and neutrality.

M. Yvon recommends the lactate of quinia for use in the same manner, while the sulphorinate is also stated to be suitable for the same purpose.

With reference to the administration of the drug to nursing women, M. Burdel finds that the drug is absorbed more rapidly when given on an empty stomach, less so when given with the food—i. e., it appears in the mother's milk in larger or smaller proportion, according to the time it was ingested. So that when it becomes necessary to administer quinine soon after delivery, its injurious effects may be avoided by giving it with meals, or with some food, and by emptying the mother's breast with the pump three hours after the dose.

Infants at the breast never suffer from malaria, no matter how cachectic the mother, until after the fourth month; this immunity may last to the period of dentition.

CODEIA IN CANCER OF THE PYLORUS. (*New Remedies.*)

Professor Austin Flint recommends 0.06 of codeia most highly, in cancers of the outlet of the stomach, saying that in such a case it completely stopped the emesis and pain, and the patient even thought the tumor was decreasing in size.

HEINSCH'S SUGAR TEST FOR DANGEROUS ORGANIC MATTER IN WATER.

Place a quantity of the water in a clean, glass stoppered bottle; add a few grains of pure sugar, and expose to the light in a window of a warm room. If the water becomes turbid, even after exposure for a week, reject it; if it remains clear it is safe.

AMMONIO-SULPHATE OF COPPER IN EPILEPTIFORM FACIAL NEURALGIA.

Frère, of the Lariboisière, has found this, in doses of 0.07 twice a day, succeed well, when other means had failed. In one case 0.10 were given at one dose.

WARTS.

Dr. Craig, of Montreal, recommends a four per cent. solution of chloral hydrate, as a painless but effectual application to warts.

NEW INSTRUMENTS.

RAPID AND FORCIBLE DILATATION OF CERVICAL CANAL FOR REMOVAL OF OFFENDING BODIES. WITH DESCRIPTIONS OF INSTRUMENTS FOR THE PURPOSE. BY H. T. HANKS, M. D., NEW YORK.—Two years ago, a patient of Dr. W. H. Hall, who had previously suffered from epilepsy, became pregnant. She had given birth to two healthy children before, and had carried them to full term without serious inconvenience to herself. At this time, however, the epileptic seizures became exceedingly frequent and alarmingly severe—so much so, indeed, that Dr. Hall and myself both decided that, since medicines had apparently no control in averting the attacks or mitigating their severity, the only safe and judicious course to pursue would be to cause the expulsion of the two months fetus. The patient lived a few miles out of the city, and it was the wish of the family that Dr. Hall and myself should take full charge of the case without calling in the local physician. Under these circumstances, it became a question with me how to safely and thoroughly accomplish this end and make but one visit myself, and cause as little journeying as possible for Dr. Hall, and not oblige any physician to call until the following day.

I finally decided to rapidly and forcibly dilate the canal, give a full dose of ergot hypodermically, and then remove the ovum by means of the placenta forceps or loop of wire.

Knowing how little dependence can be placed upon Molesworth's, Barnes', or the soft rubber air dilators, when they have been once in use and laid aside for a few months, and knowing from experience how well the healthy unimpregnated cervix uteri will bear rapid dilatation up to No. 24, American scale of bougies, without laceration, I decided to dilate in this case in the most rapid manner possible without injury to the parts involved.

We therefore anæsthetized the patient, introduced a speculum, seized the anterior lip, and in regular order introduced the common hard rubber dilators (see *Medical Record*, Sept. 25, 1875,

page 655), from No. 16 up to No. 22, then changed to the smaller sized rectal bougie, and from this to the next larger, and so on up to No. 10. At this time a full dose of fluid extract of ergot was given hypodermically, after which the placenta forceps were introduced and the ovum was quickly removed. The whole operation did not last forty-five minutes.

The patient made a quick and in every way satisfactory recovery.

Since this time I have witnessed the bursting of several of Molesworth's and Barnes' dilators, and I thought much of hard rubber dilators, to take the place of these perishable soft rubber ones. I have therefore had the Messrs. Stohlmann, Pfarre & Co., of this city, manufacture for me a set of *ten* dilators, attached to a double-curved handle.

Each dilator is hollow and more or less ovoid according to its size. The length varies from $6\frac{1}{2}$ to $8\frac{1}{2}$ ctm.; the diameter from 12 m. m. to 5 cm., in proportion to the length. The larger end of each is made to fit either end of the screw-handle rod, which is curved in opposite directions at each extremity, flattened on one side, for security of grasp, and about 13 ctm. in length.

In using these dilators, it is absolutely necessary to have a strong tenaculum forceps in order to firmly fix the cervix. The Messrs. Stohlmann, Pfarre & Co. have made for me a very convenient tenaculum forceps, which will be found to fully meet the requirements of each case, and has never yet been known to tear the cervix.

With this instrument I seize the anterior lip—one blade inside, the other opposite—fully 1 m. m. from the external os, and firmly fix the cervix, either with or without the use of a speculum, according as it is expected to have much or little trouble in removing the contents of the uterus. I then gently but firmly force the smallest dilator into and through the external os, and entirely enter the cervical canal. This end is then withdrawn, and the opposite and next larger dilator is in like manner pushed into the canal. When this end is tightly held within the canal, the smallest dilator, which is now grasped by the hand, is unscrewed and a larger one is screwed in its place. Then the ends are again reversed, and the same course is pursued until

the canal is of sufficient size to allow the quick and safe removal of the offending body.

I have used this set of dilators with entire satisfaction in four cases. One patient I saw in consultation with Dr. J. R. Cypert, one in consultation with Dr. D. C. Comstock, and two in my own private practice, besides the one patient in which I used the rectal bougies as before mentioned, and in which the operation consisted in dilating in a similar manner.

The patient of Dr. Cypert had carried a dead three months foetus for several weeks when the doctor first saw her. She had lost much blood. He applied a tampon after introducing a small sponge-tent. On the following day I saw the lady with him, and on giving ether we easily dilated with these instruments here described, and in about thirty minutes removed the bones and some other portions of the dead foetus.

The patient made a good recovery.

Dr. Comstock's patient was six weeks pregnant when attacked with uterine hæmorrhage. He applied a tampon and gave anodynes. She had but little subsequent hæmorrhage, but suffered from slight backache pains, and an offensive, dark-colored discharge from the vagina. On my visit I found the external os the size of the little finger, while the internal os was well dilated, and by making firm pressure a loose, fleshy body, the size of a pigeon's egg, could be felt near the dilated internal os. The patient was in good physical condition, and we decided to deliver the ovum without giving ether or using a speculum. The anterior lip was seized with but little difficulty, and the four smaller sizes of the dilators in regular order quickly introduced, and in exactly sixteen minutes from the time I took my place at her side the ovum was removed. It was found to have been filled with a large clot of blood which had completely obliterated the embryo.

My own cases were much like this last. In both, the question of relieving the patient from the danger of hæmorrhage and hours of suffering, together with the saving of much time for myself, came up, and was decided for me by the patients, who were eager to have the anxiety and suffering ended.

One patient had lost "great quantities" of blood before my

arrival. The instruments were used in both cases without ether, with success, and both patients did well.

In conclusion, I can recommend the dilators, and should advise their use, where the cervix is healthy, and it is necessary to remove :

1. A retained small or large piece of placenta.
2. A fibrous polypus or tumor.
3. An aborted ovum or dead foetus.

Even in cases where the child is viable, and it is found necessary (as in placenta prævia) to dilate rapidly, I am certain these instruments would accomplish quickly and safely, in judicious hands, what no other dilators have ever done.

For sale by Messrs. Sharp & Smith.

DESCRIPTION OF A FLEXIBLE METALLIC UTERINE SOUND AND A FLEXIBLE METALLIC PROBE.—BY EDWARD W. JENKS, M. D., Professor of Medical and Surgical Diseases of Women, and Obstetrics in Detroit Medical College.—Every one who has had occasion to explore the uterus where there were any adventitious growths within it, or where from any cause there was an abnormality in either the direction or length of its cavity, can well appreciate the value at times of a flexible uterine sound as a diagnostic aid. Silver, copper, lead, whalebone, rubber, and various other substances have been used as materials of which were manufactured uterine sounds that could be easily bent so as to fit into the sinuostities of the uterine cavity. In flexures of the uterus a sound that is capable of being adapted to the angular-shaped cavity is sometimes an important desideratum. It is needless to write at any length of the value of flexible uterine sounds or the variety of conditions where they can be advantageously used in diagnosis.

I venture to describe very briefly a flexible uterine sound and a probe, both of which I have used with so much satisfaction for several months that I believe they possess merits which will commend them to the profession.

The sound is 32 ctm. in length, including the hard rubber handle; the material of which the sound is composed is white metal; the entire instrument, including the handle, is hollow.

At the uterine end only, for a distance of $9\frac{1}{2}$ ctm., is there flexibility. The flexibility is effected by a thin strip of metal wound in a spiral manner, and yet when thus wound the shape is the same as the ordinary uterine sound.

There is also upon the sound a scale of inches and fraction, with a slide and screw, by which means the operator can tell while it is within the uterus the depth to which it has entered.

This instrument can also be used as a medium for making liquid topical applications to the uterine cavity. At one portion of the handle, the nozzle of an ordinary hypodermic syringe can be inserted and fluid conveyed through the length of the sound until the spiral is reached, when it escapes through the interstices in a similar manner as from a uterine drop syringe. The instrument in a similar manner can be cleansed and then all danger of conveying infection from one patient to another avoided.

The probe is composed of the same material as the sound, the principal differences are size and shape. The diameter of the probe is the same as the ordinary silver uterine probe, its length is 25 ctm. including the handle; $11\frac{1}{2}$ ctm. of the uterine end is spiral and flexible. A small bulb on the spiral indicates the normal depth of the uterine canal. This probe like the sound is hollow and like it, a syringe can be used at the handle for making applications to the uterine cavity. I have found this a valuable instrument for use elsewhere than in the uterus. I have used it to explore abscesses about the pelvis and elsewhere, also have made it the medium for carbolizing sinuses and deep-seated abscesses; any fluid inserted in the opening of the handle escapes through the spaces of the spiral, and through a small hole at the other end of the probe. The instrument thus serves other purposes than that of a probe.

For sale by Messrs Sharp & Smith.

I EARLY adopted, on antizymotic principles, the administration of from 10 to 30 drops every two, three or four hours, of *sulphurous acid* diluted, in scarlet fever. I treated eleven severe cases. The ten treated after its adoption recovered.—*Waterman*.

Items.

AMERICAN SCIENCE.—There are two names in the extended and honored list of American *savants* which every student regards with the highest respect and pride ; we allude to Professor Gray, of Cambridge, and Professor Dana, of Yale. These two investigators in different fields have done more to make American science respected the world over than any others ; and they may be justly regarded as the highest living authorities in the departments of science in which they have labored. The great works to which they have devoted their lives are standard and authoritative among educated men everywhere, and will continue to be long after their authors have passed away. The “Mineralogy” of Dana, and Gray’s “Botany,” form as thorough and exhaustive compendiums of two departments of science as the present stage of learning affords. They are vast storehouses in which are hoarded the ripest scholarship and the results of the widest researches of the age.

These two distinguished men are now in the evening of life, but still hard at work. Every hour of every day finds them either in their cabinets among their rare collections of specimens, in the field, or at their desks ; and we can only hope that life and strength may be spared to them for many years, that they may make further and even richer contributions to human knowledge. Great learning and exhaustive intellectual labor, as far as our observation extends, do not produce unsocial habits of life, or pride of position, or arrogance ; on the contrary, the truly great man in science or literature is in a marked degree genial and condescending. The men under consideration are in social life simple, modest, kind, generous, approachable. Such noble natures

have no place for the pedantries and follies which environ little minds, when fortuitous circumstances bring them into notice. The earnest seeker after knowledge, however humble or untaught, never meets with rude rebuffs from the truly learned; they are the helpers and patrons of the lowly, if capable and honest.

It is not unusual to honor in some public manner our distinguished poets and literary writers at certain important epochs in their lives, and we know the suggestion that in like manner we remember those who by their researches in science have shed such high honor upon the American name will be gladly received. It is true, no garlands we can weave will add to the lustre of the names of our great scientists, but some appropriate mark of public appreciation of their labors and acquirements it would be delightful to bestow,—a delight which might not be denied us by those so deserving of our homage and respect.—*Exch.*

A SECULAR view of the controversy between certain members of the Association of Superintendents of Insane Asylums and certain specialists in nervous diseases, is given in the following article from the *Utica Morning Herald*:

"Our news columns have contained mention of proceedings for libel against Dr. John P. Gray, of the State Lunatic Asylum, in behalf of Dr. W. A. Hammond, of New York. The case may command some attention, and deserves further notice. The basis of the suit is an address written by Dr. Eugene Grissom, superintendent of the Insane Asylum for North Carolina at Raleigh. This was printed in the *American Journal of Insanity*, published by the State Asylum, and of which Dr. Gray, as superintendent, is the editor. This address was printed as a paper read before the American Association of Medical Superintendents of the Insane, held in Washington last May. The paper was the subject of some discussion in that body, and was reported at some length in the Washington newspapers. Dr. Hammond made it the text of an open letter addressed to Dr. Grissom, in which he revels in vituperative language. In his address, Dr. Grissom does not mention the name of Dr. Hammond, but describes with sharp lines the "false expert," and cites certain passages in the works and career of Dr. Hammond

in illustration. To Dr. Hammond's open letter, Dr. Grissom made reply in print, and applied his address with more directness to Dr. Hammond. Both gentlemen are pretty free of speech, and both express very moderate estimates of each other. Dr. Hammond, by rushing into print in response to Dr. Grissom's address, at first put his case before the tribunal of readers. It may be because he feels himself worsted there that he goes to the courts.

"So far as Dr. Gray is concerned, the verdict of all who will examine the facts must be that he has in no way transgressed the strictest code of etiquette, much less any statute. In accordance with uniform custom, there were accepted for publication in the *Journal of Insanity* the official proceedings of the American Association of Medical Superintendents of the Insane, and this address and the debate upon it were parts of that report. Such a document could hardly be refused, and any injury which Dr. Hammond has sustained must date back to the association. The position of Dr. Gray is different from that of editors in general. The *Journal of Insanity* is the property of the State, and his connection with it is solely as the servant of the State.

"Dr. Hammond seeks notoriety, and his purpose in this libel suit may be to secure attention where he has not been able to compel it otherwise. In view of his published response to the address of which he complains, no jury in the world would award him a copper of damages.

THE FOLLOWING CIRCULAR LETTERS will be read with interest :

WAR DEPARTMENT,
SURGEON GENERAL'S OFFICE, }
Washington, Sept. 28, 1878.

GENERAL JOSEPH K. BARNES,

Surgeon General, U. S. Army.

GENERAL:—I have the honor to submit the following suggestions with regard to the approaching United States Census, and to request that if they shall seem to you worthy of attention, they may be brought to the notice of the Congressional Committees which have the subject under consideration.

Having been consulted on certain points relating to the mortality statistics of the last census, I have given special attention to their probable value as affording a means of judging of the condition of the public health, and of the prevalence of certain causes of disease in different localities, and as a result of this examination, it appears to me that interesting as they are, it would be possible to obtain data much more valuable, from both a scientific and economic point of view, in relation to the health of the people of the United States.

As is pointed out by the Royal Sanitary Commission of England, "however complete the registration of deaths may be, it cannot give a fair estimate of the sickness which is not fatal, it cannot indicate where or how these are to be prevented, it cannot tell the cost which is worth incurring for their diminution."

It is probable that results of the greatest interest and value might be obtained from a record of sickness, and especially of those forms which are known to be due to contagion or to special local conditions.

So far as I can learn, the only attempts to obtain a registration of disease in connection with a national census have been made in Ireland, where the disease with which each individual is suffering on the day of the count is recorded; and in Portugal, where a query is inserted as to sickness, but in what precise form I have not been able to ascertain.

As chairman of the Section of Hygiene and State Medicine of the American Medical Association, I have corresponded with a number of the members of the section, and with other skilled sanitarians, all of whom unite in the opinion that it is possible in the next census to obtain some data with regard to disease which will inaugurate a new branch of statistics in this country, and that it is highly desirable that the general government should take the lead in this matter.

The principal difficulty has been to obtain substantial agreement as to the questions upon which information is most desired, keeping in view the fact that these questions are to be asked and answered by unprofessional men.

As the result of the conferences above alluded to, and of careful study of what is practicable as well as what is desirable, I

venture to suggest the following five queries as being, if not the best, at least such as will bring out a vast amount of information which will be extremely interesting and useful to the political economist, the sanitarian and the physician.

The amount of information which moderately complete answers to them will give, is not to be estimated from the questions themselves only—for it should be remembered that of each individual to whom these queries apply, the age, sex, color, parentage and occupation are also recorded in the schedules now in use, and hence the influence of these conditions separate or combined upon the diseases to which my proposed queries relate can be made to appear in various ways.

The queries suggested are as follows :

1st. Number of days during past year in which the person was unable to follow his or her usual occupation on account of disease (D) or injuries (I). (Attendance at school considered as an occupation.)

2d. Is the person sick on the 30th day of June ; if so, name disease or injury.

3d. Is the case being treated in hospital (H), by a physician from a dispensary or public charity (C), by a private physician (P) or without a physician (N).

4th. Has the person during the past year had any of the following diseases, viz : Small pox or varioloid (S P or V) ; scarlet fever (Sc) ; measles (Me) ; diphtheria (D) ; typhoid fever (T F) ; malarial fever (M F) (includes ague, bilious fever and remittent fever) ; yellow fever (Y F) ; acute lung diseases (L D) (includes lung fever, pneumonia and pleurisy) ; acute rheumatism (A R) ; cerebro-spinal-meningitis (C S M).

5th. What has been the cost to the person (or head of the family on his account) during the past year from sickness, in—

a. Loss of wages or salary ?

b. Cost of medical attendance, medicines and nursing ?

These queries for the most part are self-explanatory. The second question is that used in the Irish census, the name of the disease being entered in the persons' own words (in Ireland it is often entered in Irish) leaving it to an expert at the central office to classify it as best he can. The fifth query can in most cases

be answered only approximately, but for the working classes, at all events, the answers will be near enough to the truth to be of value.

Very respectfully, your obedient servant,
(Signed) J. S. BILLINGS,
Surgeon, U. S. Army.

WASHINGTON, D. C., October —, 1878.

It has become a custom that the chairman of the section of hygiene and state medicine of the American Medical Association shall propose subjects for the special attention of the section.

In accordance with this custom, I would respectfully suggest the following subjects for consideration at the next meeting, viz :

I. State and Municipal Organizations for Public Hygiene, and their relations to Practitioners of Medicine.

II. Vital Statistics ; including Statistics of Disease.

III. The Causation and Prevention of Yellow Fever.

Under the first heading, papers are promised upon: (a) The proper organizations of boards of health. (b) The relations of the Massachusetts system of medical examiners to boards of health. (c) The relation of State control of medical education to boards of health. (d) The relations of the code of ethics to State and municipal sanitary organizations.

The address of the chairman of the section will relate mainly to the second heading, and in this connection your attention is respectfully invited to the inclosed proposal for obtaining some statistics of disease in the next census, and if you approve of it, it is hoped that you will use your influence in its favor with Congress.

Under the third heading, the lessons of the recent epidemic and methods of investigation of yellow fever, will be considered.

Your assistance in the work thus indicated is respectfully requested. Please notify me as to whether you will undertake to prepare a paper for the section, or to aid in the discussions, indicating also the subject which you have selected.

Very respectfully and truly yours,
J. S. BILLINGS,

*Surgeon U. S. Army, and Chairman of the Section of Hygiene,
American Medical Association.*

MESSRS. E. H. SARGENT & Co., dispensing chemists of this city, have republished, at their own expense, the valuable pamphlet on Metric Weights and Measures for Medical and Pharmacal Purposes, originally prepared for the U. S. Marine Hospital service, by Oscar Oldberg, Phar. D. It is intended to furnish a copy of this pamphlet to all reputable physicians in Chicago who desire to obtain it.

In this commendable enterprise Messrs. E. H. Sargent & Co. have taken a step which not only will greatly aid in extending a knowledge of the metric system, but which reflects great credit upon themselves. The JOURNAL AND EXAMINER takes pleasure in extending to them its congratulations.

POLITICS AND SCIENCE.—Dr. A. W. Heise, who has held the office of physician to the Illinois State Penitentiary at Joliet for the past three years, was lately deposed from office “by reason of expiration of term of service.”

Dr. Heise managed the medical affairs of the penitentiary with credit to the institution and himself. He instituted sanitary regulations which practically abolished endemic and epidemic disease within the prison. The ratio of sick in hospital is said to be lower than that of any other prison in the United States, as shown by his annual report, there being an average of six hospital cases from an average number of convicts amounting to over 1,700.

The commissioners have appointed a “homœopathist” to take the place of the prison physician.

DOUBTFUL NOVELTIES.—Dr. W. P. Gibbons, of California, does a good work in the October number of the *Pacific Medical and Surgical Journal*, by exposing the pretended new remedies from California called *Yerba Santa*, *Berberis Aquifolium*, *Cascara Sagrado* and *Yerba Reuma*. They have been pushed on the profession by a Dr. I. H. Bundy, and by the efforts of Parke, Davis & Co., of Detroit. We regret to add that several medical editors have either been entrapped or have deliberately been bargained into giving their sanction and aid to this form of mercantile exploitation of the profession and their patients.—*Med. & Surg. Rep.*

Obituary.

DR. LUCIUS CLARK, of Rockford, died at his residence Tuesday evening, Nov. 5, 1878, after an illness of nearly three months, in the 66th year of his age. On August 22d he suffered a paralytic stroke, and on Monday evening, Nov. 4, he began failing rapidly and continued to decline until Tuesday morning, when he became unconscious, and remained in that condition until he expired.

Dr. Clark was of Massachusetts parentage; was born in Amherst, June 10, 1813, and was educated there. He pursued his medical studies at Berkshire Medical College, Mass., and at Geneva Medical College, N. Y., where he received the first diploma given by that institution. He practiced in Western New York, at Marion, Palmyra and Chili, for 10 years; finally removed to Rockford in 1845, where he resided and was in active practice until his death. He was a member of the American Medical Association, and of the Illinois State Medical Society, and during the war was in the field a short time as president of the board of examining surgeons for the State of Illinois. He was a trustee of Rockford Female Seminary from its organization. In 1836 he married Julia A. Adams, of Hinsdale, Mass., who died in 1861. In 1864 he married Charlotte M. Townsend, of this city.

The deceased had four brothers, two of whom are physicians, Dr. E. N. Clark, of Beloit, and Dr. Asabel Clark, of Detroit, Michigan. He has two sons who are also practicing physicians, Dr. L. A. Clark, of San Francisco, Cal., and Dr. D. S. Clark, of Rockford. He also leaves a wife and two young daughters. Dr. Clark having been a resident of Rockford for 33 years, was widely known, and was very highly esteemed by all with whom he came in contact. A wide circle of friends mourn his loss.

At a special meeting of the Rockford Medical Association, Nov. 6, 1878, the following resolutions were unanimously adopted :

WHEREAS, This Association has learned with deep regret of the loss of one of its oldest and most valued and respected members, in the death of Dr. Lucius Clark, who for a third of a century has been a zealous co-worker in our midst ;

Resolved, That we recognize in this event the departure from among us of one who for many years was an ornament to this Society, to the profession of medicine, and to the community at large.

Resolved, That we extend to his afflicted family in this their bereavement the tribute of our earnest sympathy, and assure them that we will ever cherish his memory in kindest regard.

Resolved, That as a token of our respect for the departed, this Association, as such, attend the funeral.

Resolved, That a copy of these resolutions be presented to the family, and sent to the local press, and CHICAGO MEDICAL JOURNAL AND EXAMINER, for publication.

A. M. CATLIN, *President*,

H. W. TEBBETTS, *Secretary*.

At a meeting of the senior class of the Chicago Medical College, the following resolutions were passed :

WHEREAS, In view of the loss we have sustained by the decease of our friend and classmate, Oliver L. Latta, and of the still heavier loss sustained by those who were nearest and dearest to him ; therefore, be it

Resolved, That it is but a just tribute to the memory of the departed to say that in regretting his removal from our midst we mourn for one who was in every way worthy of our respect and regard.

Resolved, That we sincerely condole with the family of the deceased on the dispensation with which it has pleased Divine Providence to afflict them, and commend them for consolation to Him who orders all things for the best, and whose chastisements are meant in mercy.

Resolved, That copies of this heartfelt testimonial of our sympathy and sorrow be forwarded to the parents of our departed friend, to the Goshen papers, and to the CHICAGO MEDICAL JOURNAL AND EXAMINER, for publication.

C. H. BRYANT,

C. H. FEYERS,

J. M. WILCOX.

Committee.

Nov. 6, 1878.

ANNOUNCEMENTS FOR THE MONTH.

SOCIETY MEETINGS.

Chicago Medical Society—Mondays, Dec. 9 and 23.

West Chicago Medical Society—Mondays, Dec. 16 and 30.

MONDAY.

CLINICS.

Eye and Ear Infirmary—2 p. m., Ophthalmological, by Prof. Holmes; 3 p. m., Otological, by Prof. Jones.

Mercy Hospital—1:30 p. m., Surgical, by Prof. Andrews.

Rush Medical College—2 p. m., Dermatological and Venereal, by Dr. Hyde; 3 p. m., Medical, by Dr. Bridge.

Woman's Medical College—2 p. m., Dermatological, by Dr. Maynard.

TUESDAY.

Mercy Hospital—1:30 p. m., Medical, by Prof. Hollister.

WEDNESDAY.

Chicago Medical College—1:30 p. m., Eye and Ear, by Prof. Jones.

Eye and Ear Infirmary—2 p. m., Ophthalmological, by Dr. Hotz.

THURSDAY.

Chicago Medical College—1:30 p. m., Medical, by Prof. Quine.

Rush Medical College—3 p. m., Diseases of the Nervous System, by Prof. Lyman; 4 p. m., Diseases of the Chest, by Prof. Ross.

FRIDAY.

Mercy Hospital—1:30 p. m., Medical, by Prof. Davis.

SATURDAY.

Rush Medical College—2 p. m., Surgical, by Prof. Gunn.

Chicago Medical College—2 p. m., Surgical, by Prof. Isham; 3 p. m., Neurological, by Prof. Jewell.

Woman's Medical College—11 a. m., Ophthalmological, by Dr. Montgomery.

Daily Clinics, from 2 to 4 p. m., at the Central Free Dispensary, and at the South Side Dispensary.

